

**The Internal and External Contingent Factors  
that Affect the Determination of Profitability  
in Islamic Banks in Comparison to  
Conventional Banks in Egypt**

By

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## **Abstract**

Islamic banking system is one of the fastest growing segments of the international financial industry. This system has been receiving a growing attention nowadays especially after the global financial crisis which gave Islamic banks an opportunity to prove their resilience and contribution to financial and economic stability. The beginning of the Islamic banking in its contemporary mode was in the sixties of the past century by the first modern Islamic banking experiment which was undertaken in Egypt in 1963 by Ahmad Al-Najjar. Islamic financial institutions are established to operate commercial banking activities within an Islamic teaching perspective which depends on the elimination of any prohibited element in Islamic Shariah jurisprudence such as interest, gambling, speculation, dealing in pork or alcohol.

The very distinct nature of Islamic banking led to a growing interest in determining the success factors of such type of banks especially that in most of the cases they operate with conventional banks Vis a Vis within the same market and sometimes under the same regulatory framework.

The aim of this research is to make a comparative study between the performance of Islamic banks and conventional banks in the Egyptian financial market. The study is an attempt to determine the internal and external contingent factors that affect the profitability of Islamic banks in Egypt in comparison to conventional banks while taking into consideration the fact that both types of banks operate under the same rules and regulations. The goal is to discover whether the different nature of operations between the two types of banks is likely to affect their determinants of performance.

The main motivation for undertaking this research is to fill the gap in literature and provide some information that might benefit both academics and practitioners in this field.

A thorough revision of the literature suggested contingency perspective as the most suitable and appropriate theoretical framework for this type of research (Thomas' (1991); Schweikart's (1985); Otley, 1980). Data were gathered in this research through the collection of annual financial reports for the two Islamic banks working in Egypt

and a sample of eleven conventional banks registered in the stock market. The study covered the period from 2002 to 2010.

The findings indicate that in general, the performance of conventional banks in Egypt outweighed that of their Islamic counterparts. Moreover, it can be concluded from the results of the study that there are differences between the profitability determinants of Islamic banks and conventional banks. And eventually, it can be inferred that the nature of operations has an effect on the determinants of profitability in Islamic banks and conventional banks.

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## **List of Abbreviations**

AAA	The American Accounting Association
BTP/TA	Before Tax Profit/Total Assets
CAMEL	Capital Adequacy, Asset Quality, Management Quality, Earnings, Liquidity
CCE/TA	Cash and cash Equivalent/Total Assets
CF/TA	Capital Fund/Total Assets
CORTXR	Corporate Tax Rate
CTIR	Cost to Income Ratio
CSTF/TA	Customer and Short Term Funding/Total Assets
EQ/NLO	Equity/Net Loans
EQ/TA	Equity/Total Assets
GDP	Gross Domestic Product
GDPGR	Gross Domestic Product Growth rate
GDPPC	Gross Domestic Product Per Capita
ILO/TLO	Impaired Loans/Total Loans
INFR	Inflation Rate
INOD/AVGE	Income Net of Distribution/Average Equity
INTBR	Interbank Ratio
LIQA/CSTF	Liquid Assets/Customer & Short Funding
LIQA/TDB	Liquid Assets/Total Deposits & Borrowing
LOLR/ILO	Loan Loss reserve/Impaired Loans
NCO/TLO	Net Charge Off/Total loans
NCO/NIBPLOL	Net Charge Off/Net Income Before Provision for Loan Losses
NIE/AVGA	Non Interest Expenses/Average Assets
NIEA/TA	Non Interest Earning Assets/Total Assets
NIM	Net Interest Margin
NIR/AVGA	Net Interest Revenue/Average Assets
NLO/CSTF	Net Loans/Customer & Short Term Funding
NLO/TA	Net Loans/Total Assets

NLO/TDB	Net Loans/Total Deposits & Borrowing
NNIM	Net Non Interest Margin
NOI/NI	Non Operating Items/Net Income
NOIT/AVGA	Non Operating Items & Taxes/Average Assets
OH/TA	Overhead/Total Assets
OLS	Ordinary Least Square Model
OOI/AVGA	Other Operating Income/Average Assets
PLOL/ILO	Provision for Loan Losses/Impaired Loans
PLOL/NIR	Provision for Loan Losses/Net Interest Revenue
PLOL/TLO	Provision for Loan Losses/Total Loans
PLS	Profit and Loss Sharing
PTOI/AVGA	Pre-Tax Operating Income/Average Assets
REP	Recurring Earning Power
REQRESR	Required Reserve Ratio
RIR	Real Interest Rate
ROA	Return on Assets
ROAA	Return on Average Assets
ROE	Return on Equity
ROAE	Return on Average Equity
SD/CF	Subordinated Debt/Capital Fund
SIZE	Total Assets
SPSS	Statistical Package for the social Science
TD/TA	Total Deposits/Total Assets
TL/TA	Total Liabilities/Total Assets
TLO/TA	Total Loans/Total Assets

# **Chapter One**

## **Introduction**

### **1.1 Research Background**

The banking sector is one of the most important economic sectors and the most influential and responsive to change, whether international or domestic. The banking sector is a major tool of the financial policy that affects economic growth. A well-established, trustworthy and profitable banking system is one of the key success factors of economic development.

The repetitive financial crisis led to difficulties in many conventional banks all over the world, while in contrast, Islamic banks were largely protected against these crises (Johnes et al, 2014). It was argued that the nature of operations in Islamic banks which is highly regulated and guided by Islamic laws and Shariah principles totally prohibited investment in any type of financial products that adversely affected conventional banks and ultimately resulted in the financial crises. Therefore, Islamic banking has increasing appeal to more investors other than the traditional Muslims. Nowadays, there are more than 300 Islamic financial institutions spread across 70 countries all over the world (Johnes et al, 2014).

Islamic banking is a financial system that works in consistent with principles of Islamic law or Shariah and guided by Islamic economics. In particular Islamic law prohibits usury or Riba, which is the collection and payment of interest. Moreover, Islamic law prohibits investing in businesses that are considered unlawful according to the Islamic law or Shariah. Recently, a number of Islamic banks have been established to respond to the growing demand to Islamic finance. This growing demand is driven by the globalization and the enormous wealth of some Muslim states in the Middle East and Southeast Asia. Islamic finance has moved from just being a niche position to becoming a mainstream component of the global banking system worldwide.

Nowadays, Islamic banking worldwide is faced with many challenges. The major challenge that negatively affects Islamic banking is the socio-political instability. The so-called Arab Spring worsened the situation in the Middle East and Africa especially

for those investors and businesses who are Shariah sensitive. Moreover, the absence of Islamic financial regulatory framework led to a slack in the progress of Islamic banks especially in those countries where Islamic banks work within a conventional regulatory system. In addition, most Islamic banks are relatively small and their business is primarily concentrated within one or two markets at most (Nazim and Bennie, 2012).

The Egyptian banking system is one of the most important channels for mobilizing savings in the form of credit or investment tools and working to direct them to more effective and more profitable productive sectors and activities. Moreover, the banking system plays an important role in attracting investments to avail the financial resources necessary for development needs.

Since the economic reform program implemented in Egypt in the early 1990, Egypt has paid great attention to the reform of the banking system through merger and acquisition to face global banking competition, expand the capital base of banks and restructure banks in such a way to keep up with international challenges (Kenawy, 2009).

Islamic banking assets are estimated to gross USD 1.7 trillion in 2013 with an annual growth rate of 17.6% (Nazim and Bennie, 2012). This growth was fostered by the innovative aspect of Islamic finance, reforms in regulatory and taxation frameworks aimed at enforcing the new Islamic financial boom (Fayed, 2013).

Although Egypt is considered the birthplace of Islamic finance since its inception in 1963, yet, its growth has evidently lagged behind. There was a continuous suspicion whether those behind the formation of Islamic institutions also had a political agenda. The Egyptian government's policy towards Islamic finance has alternated between hostility, opportunism and an attempt to manipulate and control the movement for its own motives and goals. Although, there was a widespread popular support for Islamic finance, the government has been obstructive and has been quite willing to discredit the movement towards Islamic finance even though some members of the royal family in Saudi Arabia were involved, notably Prince Mohamed Bin Faisal the founder of Faisal Islamic Bank (Wilson, 2006). Since the ruling of Mubarak in the eighties, he sought to enforce a more secular financial system avoiding any Islamic or religious diacritics. In 2009, Islamic banking in Egypt accounted for 3 to 4% only of Egypt's \$193 billion

banking system in comparison to 46% in the United Arab of Emirates. Nowadays, there are 14 Egyptian banks, with 211 Islamic branches. Three of them are totally Islamic, namely; Faisal Islamic Bank of Egypt, Al-Baraka Bank and Abu Dhabi National Islamic Bank.

The rise of the importance of this research stems from this point. There is a crucial need to compare the performance of Islamic banks in Egypt relative to conventional banks while determining the internal and external factors that affect the profitability of those banks.

This study is important for banks' managers, regulators, depositors, investors and shareholders as it presents a real reflection of the true and actual situation of the banking system in Egypt whether it is Islamic or conventional. The purpose of this study is to provide a full picture of the financial position in the Egyptian banking sector. Moreover, it aims at giving a detailed analysis of the performance of Islamic banks relative to the performance of conventional banks in Egypt.

## **1.2 Research Problem**

Generally, it can be concluded that the issue of Islamic banking and their comparative performance with their conventional peers has been very much debatable. Moreover, studies conducted to measure the determinants of performance of Islamic banks have generated contradicting results regarding the different factors that affect their profitability levels and performance. In the meantime, many of the studies' results have not been in line with the theoretical background. Additionally, in Egypt in particular, as far as the researcher knows, there is no single study that assessed the determinants of performance of Islamic banks in a comparative study with their conventional rivals. All the available studies were trying to simply measure the performance of Islamic banks in isolation or in comparison to conventional banks but without any assessment of the significance of these differences in performance, neither a measurement of the factors that affected and shaped these differences.

Furthermore, the current development of Islamic banking industry in Egypt is facing many challenges that hinder its progress and abstain its promising potential. Among

these challenges, it could be mentioned that the actual practices of the Islamic banking industry in Egypt is revealing less than ideal assets-liabilities management. The Islamic banks have an inclination and tendency towards short-term financing and investment. Besides, Egypt has no Islamic money market to help Islamic banks in managing their liquidity levels other than the traditional windows such as government treasury bills or borrowing from the central bank or from other conventional banks which are all interest-bearing means of finance. Also, there are no sufficient trained personnel in the Islamic field; most of the bankers working in Islamic banks are not specialized in Islamic banking thus providing a weak customer service to Islamic banks' customers. Finally, the absence of a convenient Islamic regulative and taxation framework is considered a major obstacle facing Islamic banks in Egypt.

Consequently, it can be concluded that there is a lack of knowledge concerning the current state of Islamic banks and their practices in Egypt. Equally, there is a lack of knowledge concerning the contingent factors that affect the performance of banks and the implications that the nature of banks' operations have and their effect on the contingent factors that affect their performance.

All the previous facts have highlighted the importance of having a comprehensive comparative study between Islamic and conventional banks performance while depicting the differences that exist in the contingent factors that affect their profitability levels.

### **1.3 Research Aim**

This research is an attempt to draw a comprehensive picture about the current state of Islamic banks in Egypt. Egypt is selected as the context for this study because of the contradictory and peculiar facts concerning the state of Islamic banking. Although Egypt was the starting point of the contemporary Islamic banking, yet, the growth of Islamic banks is still very modest relative to other countries that started their Islamic banking experience many years after Egypt did like Bahrain which started its first Islamic bank in 1979. Nowadays, Bahrain became the global leader in Islamic finance and banking with the highest concentration of Islamic financial institutions in the Middle East (Ali, 2011).

The research will provide a comparative study between the performances of Islamic banks with a sample of their conventional peers working in the same market. Then, there will be an assessment of the contingent factors that affect the performance of Islamic banks and finally drawing a conclusion about whether the nature of operations will result in a difference between Islamic and conventional banks' contingent factors.

Specifically, within the context of Islamic banking, the objectives of this research are paraphrased as follows:

1. Determine whether there are differences between the performance of Islamic banks and conventional banks in Egypt to know which type of banks operate more efficiently.
2. Identify the specific contingent factors (internal and external) that affect the profitability of Islamic banks.
3. Identify the specific contingent factors (internal and external) that affect the profitability of conventional banks and draw a conclusion about whether the type of banking operations (Islamic or conventional) will affect the nature of contingent factors that affect profitability.

#### **1.4 Importance of the Research**

The motives behind conducting this study stem from the need to understand the current situation of the Islamic banking in Egypt and the contingent factors that affect their performance. It was apparent that there is a growing attention in the literature on Islamic banking and the measurement of the Islamic banks 'performance. However, most of the literature was developed in the western, the Asian and Far East countries while little was conducted in developing countries. Due to the very specific nature of the Islamic banking studies and with the rise of globalization and internationalization, it became very important to investigate the current status of Islamic banking in developing countries.

Egypt, as one of the developing economies, underwent several economic phases in its recent history and many economic reforms that shaped its economic and financial systems greatly. Therefore, findings of this study contribute to minimize the gap in



developing countries literature concerning Islamic banking and the contingent factors that affect their profitability levels in a comparison with conventional banks.

The research comes in response to practitioners' and applied researchers' calls for more evidence concerning the current practices of Islamic banks and their performance relative to the performance of conventional banks. Despite the extensive amount of Islamic banking research conducted in the last decade, research on the internal and external contingent factors that affect the profitability of Islamic banks in Egypt as an emerging market doesn't exist as far as the researcher knows. Moreover, the study may serve as an assessment of whether the contingent factors that affected the performance of Islamic banks in Egypt are the same as in other countries of the world whether developed or developing.

Furthermore, the study will help policymakers and legislators to realize that Islamic banks are in deep need for specific rules and regulations to function effectively and efficiently in the Egyptian market. Finally, this study is important for banks' managers to detect those factors that enhance the profitability levels and affect their performance positively.

### **1.5 Contribution of the study**

Recognizing a gap in the literature to determine those contingent factors that affect the profitability of Islamic and conventional banks has been the key driving force for conducting this research. Furthermore, it was intended to conduct this research in the developing country context; there has so far been relatively little research into Islamic banking practices in developing countries and no research on the determination of profitability in Islamic banks in Egypt.

The very specific nature of the Egyptian country makes it a promising candidate for this fruitful research. Although, the first Islamic bank experiment was in the Egyptian country, yet, the growth of the Islamic banking in Egypt is still in its infancy stage compared to many other countries which started the Islamic experiment way after Egypt did. Furthermore, there is a hidden resistance from the Egyptian government towards

the expansion of Islamic banks in fear of facing another financial disaster as the one that happened before because of the Islamic money management companies in the eighties.

## **1.6 Originality of the study**

The originality of this study stems from the use of the contingency theory as the framework for this research. The contingency theory studies postulate that the organizational outcomes and performance are the consequences of a fit or match between two or more factors. Most of the early contingency research studies adopted this theory to examine links between organizational context and design but did not analyze organizational performance (Islam and Hu, 2012).

The contingency theory which was born in the United States of America in 1970 is concerned with the development and design of effective and profitable organization. The theory argues that the basic idea in determining an effective organization is determined by environmental characteristics and the fact that managers should weigh and consider the internal and external environmental factors of economic organizations. Concerning the banking field as a rather special industry, banks' operating performance will face the impacts from their internal and external environment. Those internal and external factors have a great impact on the performance and they constitute a contingent relationship between each other (Hongbo and Fangfang, 2010).

In 1985, Schweikart observed that there have been little empirical studies conducted to support the concept of environmental influences on accounting which motivated him to propose the contingency theory as a vehicle to establish a theory of international accounting. He mentioned that "comparative research using nations with very similar accounting methods, institutions and decision problems may be the only vehicle available to extract many significant environmental variables. This research design implies that the environments in such countries will have a high degree of similarity, but that subtle differences may be more reliable predictors of information-relevance predictors."

While in 1991, Thomas developed further the application of contingency theory to corporate financial reporting. Thomas included the societal variables in his general

contingency mode for financial reporting system. He suggested that the societal variables can be conceptualized broadly as comprising the economic, legal and political system of the country.

Gernon and Wallace (1995) argued that most empirical work is needed to test for the theory that “accounting is a function of its environment”. This research provides a base for more theoretical research on the use of contingency theory in financial accounting. It provides some firm suggestions for future directions in such research, in the hope that a small advancement in theoretical development may lead to more advances in the empirical field.

## **1.7 Research outline**

This research consists of seven chapters organized as follows:

### **Chapter 2: Background to the Study**

This chapter is divided into three main parts. The first part provides an overview of the religious framework of the Islamic economic system. It explains the meaning of Islam and Shariah. It also offers an explanation of the characteristics and features of the Islamic economic system and the concepts of Riba and Zakah. It also discusses the concept of interest, and its evolution.

The second part focuses on the Islamic banking system. It provides a detailed presentation of the history of Islamic banking, its aims and objectives, its benefits. In addition, it explains the monetary policies and the central bank relationship with Islamic banks. Also, it presents the investment and financing alternatives in an Islamic banking system along with the operational framework of Islamic banking.

The third part presents an overview of Egypt, the context of the study. It illustrates the main conditions surrounding the banking industry in Egypt along with a summary of the administrative, political and economic conditions over there. In addition, there is an overview of the evolution of the banking system in Egypt and its reforms. Finally, the chapter will give a complete summary of the Islamic banking conditions in Egypt.

### **Chapter 3: literature Review**

This chapter is composed of two main parts: The first part is a review of the historical background of performance measurement systems. Also, there is a criticism of the financial and non-financial performance measurement systems. The second part introduces a detailed overview of the previous studies performed on the performance measurement in the banking industry and the Islamic banking in specific. Furthermore, it introduces the main reasons behind the importance of studying the performance of Islamic banking in Egypt.

### **Chapter 4: Theoretical Framework**

This chapter introduces a comprehensive review of the prominent theories in financial accounting. Moreover, this chapter gives a complete overview of the contingency theory as the theoretical framework for this research. The chapter discusses the evolution of this theory, its strengths and its limitations. It also discusses the contingent variables of this research. The main aim of this chapter is to clarify how contingency theory fits the nature of this research and to highlight the importance of the contingent factors.

### **Chapter 5: Research Methodology**

This chapter offers an extensive explanation about the approach of methodological positivism adopted in this study. It describes the research design and its phases, data collection methods and sampling techniques. Lastly, the chapter describes the types of statistical analyses followed in analyzing the data. Analytical procedures are presented and choices of analytical methods are justified. The main aim of this chapter is to provide a link between the theoretical and the empirical stances of this study.

### **Chapter 6: Data Analysis and Discussion of Results**

This chapter provides answers to the research questions. It highlights the statistical tests used to analyze the data which are the descriptive statistics, the paired sample t-test and the regression analysis. Moreover, it checks major methodological

assumptions for the multiple regression analysis. The main goal of this chapter is to answer the three research questions concerning the performance of Islamic banks in comparison to conventional banks, the major determinants of profitability of Islamic banks and whether these contingent factors will differ from those of conventional banks depending on the nature and type of operations of the bank. Findings are clearly provided and summarized to indicate whether or not the developed hypotheses are supported. Furthermore, this chapter discusses the findings and the results of the study, followed by a detailed discussion and analysis of the main findings while comparing them to the hypotheses formerly postulated along with a comparison with prior empirical studies. Lastly, this chapter critically reviews the current research findings and provides a detailed and thorough conclusion of the research.

## **Chapter 7: Conclusion**

Finally chapter seven presents a summary of this research with an emphasis on the thesis contribution both academically and practically. In addition, this chapter draws conclusions that are proposed to policymakers and managers of Islamic banks in Egypt concerning the Islamic banking contingent determinants of profitability and the variations that exist from conventional banks. This chapter also pinpoints the study's potential limitations followed by recommendations for various parties and avenues for future studies.

## **Chapter Two**

### **Background to the Study**

#### **2.1 Introduction**

This chapter is composed of three main parts. The first part provides an overview of the religious framework of the Islamic economic system. It also offers an explanation of the characteristics and features of the Islamic economic system and the concepts of Riba and Zakah.

The second part focuses on the Islamic banking system. It provides a detailed presentation of the history of Islamic banking, its aims and objectives and its benefits. In addition, it explains the monetary policies and the central bank relationship with Islamic banks. Also, it presents the investment and financing alternatives in an Islamic banking system.

The third part presents an overview of Egypt, the context of the study. It illustrates the main conditions surrounding the banking industry in Egypt along with a summary of the administrative, political and economic conditions over there. In addition, there is an overview of the evolution of the banking system in Egypt and its reforms. Finally, the chapter will give a complete summary of the Islamic banking conditions in Egypt.

#### **2.2 The religious Framework of the Islamic Economic System**

##### **2.2.1 What Islam Stands for**

The word “Religion” and its Arabic counterpart Deen, the essence of the message of all religions, implies and indicates setting norms and standards for human behavior which, by definition, extends to the economic part of life. Religions interfere with the economic behavior of men and women. Hence, it is not a surprise that religion relates to economics. Separation between them would be rather unusual and unjustifiable (Kahf, 2005).

All monotheistic religions have their own sets of divine values and norms with regard to human behavior in general and the economic behavior being a part of it. They all call on

human beings to observe and implement religious guidance both individually and collectively. Islam, in this respect, like other revealed religions, has its own values and norms which are supposed to be reflected in all human actions. Consequently, Islam addresses all aspects of human behavior at once with the purpose of integrating morality and spirituality in all spheres of human life. Islam is usually said to be a total way of life. This means that Islam extends its realm to organize all aspects of human life; politically, socially, spiritually, morally and of course economically around the basic pillar of faith that is the absolute oneness of GOD. The teachings of Islam imply that the Almighty GOD is the only and ultimate owner of the world and the final law giver. While man is entrusted by GOD to benefit from his property, he is responsible for developing and improving it as he will be judged accordingly (kahf et al., 1998).

Islam is the Deen (religion) of Muslims. The literal meanings of Deen are to: obey, become obedient, become abased and submissive and serve. All this, however, is impossible without the presence of some authority to be obeyed. There are other meanings of Deen as well, such as “a particular law”, “a statute” “an ordinance”, “requital”, “recompense”, “judgment”, “reckoning”, etc. The concept of Deen covers the whole life and not just ritual worship or belief in GOD; whereas, the concept of religion covers only belief in GOD and His worship ritually, it is considered a personal matter between person and his or her GOD. But in Din, a nation has to follow the code of life collectively as well as personally. Thus, the range of Deen is much wider and covers all actions, public and private. Hence the right word for Deen in English is GOD’s code of life given by His revealed word (Farouk, 2006).

### **2.2.2 The meaning of Shariah and its Sources**

Shariah, an Arabic word which means the path to be followed, is the sacred law of Islam and is defined as the Divine law-the Law of GOD. Muslims believe that Shariah is the path to GOD shown by Him to the Prophet Muhammad (peace be upon him). Islamic law controls and regulates all public and private behavior. It has both personal and general implications, ranging from regulations for etiquette, hygiene, diet, group interaction, and settlements in internal and external disputes. The Muslim world considers Islamic law as a vehicle which is able and suitable to solve all problems, civil, criminal and international (Albalawi, 2006).

Classical theory of Islamic law traces the Islamic legal system to four principal sources: firstly; the Quran, the Muslim holy book considered by Muslims to be the word of GOD and it has a superior place as it is considered to be divine and eternal since it is the true words of ALLAH. Secondly; the Sunnah and the Hadith. The Sunnah contains the words and the acts of the prophet Muhammad (peace be upon him) and relates to the practice or ruling deduced from them. The Sunnah transmits and explains the Quran. The Hadith refers to a tradition or story of the Prophet. In short, the Sunnah is what was practiced and the Hadith are the record of what was practiced. Both the Sunnah and the Hadith refer back to the Quran (Nomani and Rahnema, 1994). Thirdly; the Ijma, which is the consensus of opinion among the companions of the Prophet and the agreements reached on decisions by learned jurists on various Islamic matters. Forth; Qiyas or analogy means the comparative measurement. In legal terms, it is the process of deduction by which the law of a text is applied. The analogy must be based on law established by the text of the Quran, Sunnah or Ijma, and must not be based on a law that is meant to be specific to a particular situation or set of facts. Qiyas is an individual reasoning directed towards achieving systematic consistency and guided by the parallel of an existing institution or decision (Albalawi, 2006).

Consequently, it can be concluded that the Shariah provides a blueprint of how a society is to be organized and the affairs of its members conducted. The Shariah specifies rules that relate to the allocation of resources, property rights, production and consumption, the working of markets, and the distribution of income and wealth. However, except for a brief time at the inception of Islam, it has never been applied in its entirety (Iqbal and Mirakhor, 1987).

### **2.2.3 Characteristics and Features of Islamic Economy**

Islamic economics is economics in accordance with Islamic law. Because the Quran spoke against usury in the context of early Muslim society, it generally entails trying to remove or redefine interest rates from financial institutions. Islamic economics revolves around some values and goals. These values are concerned with the achievement of well-being within the framework of the moral norms of Islam, universal brotherhood and justice, equitable distribution of income and freedom of the individual within the context of social welfare. In doing so, Islamic economists hope to produce a



more Islamic society. The relationship between economics and Deen has a very solid ground in Islam. This has reflected positively on Muslim society, which became a distinguished society in the way it dealt with the economical life of the individual, and consequently the society as a whole (Chapra, 1996).

Islam consists of a set of beliefs which organizes the relationship between the individual and his creator; between the person and other human beings; between the person and universe; and even the relationship of the person to himself. In that sense Islam regulates human behavior, and one human behavior is economic behavior. Economic behavior is dealt by Muslims as a means of production, distribution, and consumption of goods and services. In Islam, human behavior, whether in the economic area or other areas, is not value free nor is it value neutral; it is connected with the ideological foundation of the faith (Farouk, 2006).

#### **2.2.4 Principles of Islamic Finance**

Kahf (2005) argued that the most genuine and plain definition of financing, in general, is that it is the provision of factors of production, means of payments and even goods and services without requiring an immediate counterpart to be paid by the receiver. Islamic financing is a name for providing factors of production, goods and services for which payment is deferred.

The core belief of Islamic banking and finance stems from a divine injunction against the acceptance of interest between buyers and sellers of capital resources. Such injunctions are based on compliance with Islamic jurisprudence (Shariah) which is basically extracted from the holy Quran and Sunnah. The Shariah specifies rules that relate to the allocation of resources, property rights, production, consumption and the distribution of income and wealth (Iqbal and Mirakhor, 1999). The basic reasoning behind those injunctions is the fact that interest creates social division between the rich and the poor and especially causes hardship to borrowers as the lender is seen to be exploiting other people's needs of the capital in question.

### **2.2.5 Concept of ownership in Islam**

The principle of justice is essential in all forms of Islamic financing. In profit sharing, when an Islamic bank provides means of payment to the producers, both parties share the real actual results of a productive project whether profit or loss. The goal is not just to throw the risk burden on one side, the entrepreneur, by guaranteeing a given return to the provider of money regardless of whether the project makes money or loses money. The fair play of market forces determines the rates of distribution of profit or loss of the operation among the financier and beneficiary. The owner of resources should have a full right to the increase, growth, benefit and profit that is attributed to one's property. By the same token, this owner carries the liability of any loss or destruction that may happen to its property. This is not only fair and consistent with human nature but it is the only rational thing to be done (Kahf, 2005).

### **2.2.6 Islamic Objective and Strategy for Distribution in Islam**

Islam uniquely considers resources distribution as the economic problem. Because Islam differentiates between the basic needs and luxuries, there exists no concept of relative scarcity of resources in Islam. The resources available on earth are sufficient to secure the basic needs (food, clothing, and shelter) of human beings. Yet the fact that there exists starvation, poverty, and economic backwardness, it results from mal-distribution provoked by man-made laws and systems. Because the Islamic system reflects the wisdom of the Creator, then the implementation of Islam will provide a society conducive to life that will address the needs of humanity based on the correct understanding of life. Prophet Muhammad (peace be upon him) said, "The son of Adam, if he had two valleys of gold, would desire a third and would not be satisfied till he bites the dust" (Farouk, 2006).

Under the Khilafah, natural and vital resources would be categorized as public property and a right of every citizen of the state - Muslim or otherwise - in accordance with the Prophet's Hadith that states, "The humans have a right to three things - water, green pastures, and fire-based fuels" (Farouk, 2006).

### **2.2.7 The principle of Zakah**

Zakah in language means to grow and increase. In Shariah, the word Zakah refers to the determined share of wealth prescribed by GOD to be distributed among deserving categories. It is calculated as 2.5% of wealth, income, and income and capital (Al-Qaradawi, 2000). Zakah is the third pillar of the Islamic religion and can be considered as the first pillar of the Islamic economic system. Zakah is a mechanism for the redistribution of income and wealth which is inherent in Islam, so that every Muslim is guaranteed a fair standard of living. In fact, it represents the first and most important mechanism to implement economic justice and to provide sustenance to the economically unfortunate (Kahf, 2005).

Justice and equality in Islam means that people should have equal opportunity and does not imply that they should be equal either in poverty or in wealth (Chapra, 1985).

In Islam, persons with resources above the defined exemption limit are to pay an amount levied on their wealth in order to purify the person's soul and wealth. Zakah has been regarded throughout the Islamic history as the principal welfare system and as a way of taking care of the poor and the needy in the society. It can be seen as a form of religious tax (Warde, 2010).

In fact, the significance of Zakah in Islam is different from a welfare program, and Zakah is different from a tax as it is understood today. A tax in a modern society is an obligation of individuals and other entities towards the state, whereas Zakah is an obligation not only to society and the state, but also to ALLAH. In other words, Zakah is not merely a 'contribution', but it is also a 'due' or 'claim'. A person paying Zakah is not primarily doing a favor to the recipient or beneficiary of Zakah, but is rather meeting a claim on him to purify his wealth (Burhonov, 2006).

### **2.2.8 The Meaning of Riba and the Prohibition of Riba in Quran**

The prohibition of Riba (Usury) is referred to in the Holy Quran in four surahs (chapters):

1. "That which you give in Riba for increase through the property of other people, will have no increase with Allah: But that which you give for charity, seeking the countenance of Allah, will increase: it is these who will get a recompense multiplied" Surah 30, verse 39.
2. "O you who believe! Devour not Riba, doubled and multiplied; but fear Allah; that you may really prosper" Surah 3, verse 130.
3. "That they took Riba, though they were forbidden; and that they devoured Men's wealth wrongfully. We have prepared for those among them who reject Faith a grievous chastisement" Surah 4, verse 161.
4. "O you who believe! Fear Allah, and give up what remains of your demand for Riba, if you are indeed believers. If you do it not, take notice of war from Allah and his messenger: but if you repent you shall have your capital sums: deal not unjustly, and you shall not be dealt with unjustly. If the debtor is in difficulty, Grant him time till it is easy for him to repay. But if you remit it by way of charity, that is best for you if you only knew. And fear the day when you shall be brought back to Allah. Then shall every soul be paid what it earned, and none shall be dealt with unjustly" Surah 2, verse 278-281.

Riba is a generic term which stands for all kinds of excesses above the value of a thing (Choudhury and Malik, 1992). The technical meaning for Riba is the premium, regardless how small or large, which must be paid by a borrower to a lender in addition to the principal as a condition for a loan or for an extension of its maturity. It is established that all forms of predetermined fixed return which are tied with the size and the length of the loans, regardless of their purpose, are considered by Muslim scholars as Riba (Chapra, 1985).

Iqbal (2006) noted that there are three distinct views of Riba. The liberal view confines Riba to usury only and, thus, does not recommend any change in the modern financial system in which bank interest plays the pivotal role. According to mainstream view, Riba also includes bank interest. Therefore, it implies a major restructuring of conventional financial system, though practically interest has been replaced mainly with

mark-up, which is quite similar to interest on economic grounds. Mainstream jurists also emphasize deepening of capital markets for the success of emerging interest-free system. The conservative view further extends the definition of Riba to major forms of social injustice like contracting of subsistence wages and profiteering. This view suggests a radical change in whole economic system on the lines of Marxian philosophy.

In fact, a loan is just a transfer of some (or all) of the rights from a lender to a borrower and providing it should not entitle the lender to an increase in his property rights. Such an increase violates the pivotal rule of transactions according to Islam that is justice. Thus, interest on loans is unjustified as it indicates an instantaneous creation of a claim for the lender on the borrowers' property once the contract is concluded and regardless of the outcome of the project for which the loan was provided (Khan and Mirakhor, 1992).

A debt is, by definition and by its nature, incapable of growing or increasing because it is purely conceptual; it is a relationship between a person and another person. In contrast, the same savings and/or real goods may be given on sharing bases. The owner holds on to the right of ownership and the user exerts efforts for making the goods grow and increase, like a trader who buys merchandise and finds a good market for it. Ownership remains in the hands of the finance provider and the work is applied by the finance receiver. Both contributions are recognized as they participate in creating an increment, increase or growth. Therefore, both parties deserve to share the real outcome of that exercise (Kahf, 2005).

### **2.2.9 Definition of Interest, its Origin and History**

Laws and morale codes regulating the charging of interest can be traced from the code of Hammurabi of Babylon 1800 B.C. through the old and new testaments, to the variety of medieval prohibitions, to the rules of the Quran and the contemporary regulations of the modern world (Mohieldin, 1997).

Melitz and Winch in 1978 argued that the issue of usury received a fair share of scholarly comments from Aristotle to Keynes. Aristotle pointed out that the most hated

sort of unnatural money making, and with the greatest reason, is usury, which makes a gain out of money itself, and not from the natural use of it; for money was intended to be used in exchange, but not to increase at interest (Mohieldin, 1997).

The view of Aristotle on usury along with that of Seneca the roman philosopher, canon law, natural law and authentic church teachings formed the sources of principles for the scholastics doctrine on usury (Roll, 1954). The Scholastic economic interpreted usury as the repayment of a loan while exceeding the principal amount. Moreover, any interest charged was forbidden by law in the beginning of the 12<sup>th</sup> century and was effective through the scholastic period (Persky, 2007).

As time went on, some pardons were made regarding the charge of interest, such as the case of charging interest to political enemies; using it as a penalty on the borrower if he fails to return the principal on the agreed date; using it as a compensation for the lender if he suffered damage during the lending period; compensating the lender for losing a gain because of the loan; using it in a form of gift as a reward provided by bankers to depositors in the early stages of deposit banking. Such practices became numerous to the extent that they left interest prohibition an empty shell (Mohieldin, 1997).

The scholastic doctrine was abandoned with the start of the era of individualism and laissez faire. The publication of Bentham's Defence of usury in 1787 was considered as a crucial shift in attitude towards interest as he emphasized absolute freedom in determining the terms of loans. Attempts to apply the old usury laws failed during the 19<sup>th</sup> century which witnessed, in 1854, the abolishment of usury laws altogether in the UK. Moreover, the code of Cannon law of 1917 sought to distinguish between what constituted unlawful usury from legitimate compensation incurred by the lender which is the interest rate (Mews and Abraham, 2006).

The rate of interest is a payment from borrowers to lenders which compensates the latter for parting with funds for a period of time and at some risk. Put into real terms, it is often said that lenders are being encouraged to forgo consumption now, in conditions of comparative certainty, in return for consumption later, in an uncertain future. This is a little bit misleading. In rewarding savers for parting with funds, a rate of interest is, strictly speaking, rewarding savers for giving up the ability to consume if they should

change their mind about saving. After all, there is a perfectly rational case to be made for people to save (forego actual consumption) at zero, or even negative, real interest rates since they will wish to provide for old age or other future periods of zero income (Howells and Bain, 1998).

In the Quran, both payments and receipt of interest is prohibited and considered a sin. The absolute prohibition of interest in the Quran is a command from GOD to establish an economic system in which there are no forms of exploitation or injustice. The main reasoning behind banning interest according to Quran is that the lender is assured of a positive return without doing any work or sharing of any kind of risk while the entrepreneur is not assured of such positive return despite of his management and work (Björklund and Lundström, 2005).

In other words, a person who abstains from consumption and saves should not be rewarded for that act. Unless, these savings are turned into productive investment, such a reward is incompatible with the teachings of Islam. Moreover, it is an error of modern theory to treat interest as the price of, or return for, capital. Money is not capital, not even representative capital; it is only potential capital and requires the service of the entrepreneur to transform it into actual productive use; the lender has nothing to do with this conversion of money into capital and with using it productively (Iqbal and Mirakhor, 1987).

Thus, the idea of getting a return for money deposited in a bank is unacceptable in Islam. Money must be put to a productive use and consequently a risk must be undertaken to justify this return. Furthermore, returns should not be fixed regardless of profits. Thus, guaranteed fixed interest rates, like in the case of banks' deposits, is an argument used by Muslim scholars to explain the repetitive financial shocks in the western banking system (Akacem and Gilliam, 2002).

The problem with interest is that it has to be paid in good or bad times alike, unlike dividends which can be reduced in bad times and in extreme situations even not paid at all. That is why; the burden of financing by shares is much lower than with debt. This factor should tend to have the effect of substantially reducing business failures and in turn, preserving the economy as a whole from economic instability (Chapra, 2007).

Greater reliance on equity financing has supporters even in mainstream economics. Rogoff, a Harvard professor of economics, argued that in an ideal world, equity lending and direct investment would play a much bigger role.” He also asserts, “With a better balance between debt and equity, risk sharing would be greatly enhanced and financial crises sharply muted”. However, if, in addition to a better balance between equity and debt, the debt is also linked to the purchase of real goods and services, as required by Islamic teachings, it would help a great deal in reducing instability in the financial markets by curbing excessive credit expansion for speculative transactions (Chapra, 2007, p.175).

## **2.3 The Islamic Banking System**

### **2.3.1 The History of Islamic Banking**

It is difficult to pinpoint the start of the Islamic banking; however, the consensus is that it took place for the first time in Egypt. The Mit-Ghamr savings/investment house in the Egyptian countryside is in general identified as the first Islamic bank in Egypt and in the world; it took the form of a savings bank based on profit-sharing (Ariff, 1988). Mit-Ghamr was established in 1963 by Ahmad Al-Najjar and operated until 1973, when the Egyptian government liquidated the banks (by then the bank had grown to include eleven banks). The founder Ahmad Al-Najjar wanted to start an Islamic bank in Egypt based on the German saving bank model, which he had become familiar with during his studies in Germany. Al-Najjar never mentioned the bank as an Islamic one during the process of founding it for fear of being seen as a manifestation of Islamic fundamentalism which was anathema to the political regime. Neither the state nor the public was informed that the motive behind the creation was an Islamic one (Henry and Wilson, 2004).

The banking experience of Mit-Ghamr savings/investment house; which neither charged nor paid interest; invested mostly by engaging in trade and industry directly or in partnership with others and shared the profits with their depositors (Siddiqi, 1988). Thus, they functioned essentially as saving-investment institutions rather than as commercial banks. The Nasser Social Bank, established in Egypt in 1971, was declared an interest-



free commercial bank, although its charter made no reference to Islam or Shariah (Islamic law) (Ariff, 1988).

Another successful experiment in this regard, that happened approximately at the same time as Mit-Ghamr savings bank, is the birth of the Pilgrims Fund Corporation or Tabung Haji, which started operation in Malaysia in 1963 with the following objectives:

- I. To enable Malay Muslims to save gradually, in order to support their expenditure during Hajj (pilgrimage) and for other beneficial purposes.
- II. To enable Malay Muslims to have active and effective participations in investment activities which are permissible in Islam through their savings.
- III. To protect, safeguard the interests and ensure the welfare of pilgrims during pilgrimage by providing various facilities and services (Ariff, 1988).

Bearing such objectives in mind, Tabung Haji has been running successfully since then. It has provided excellent and comprehensive services to satisfy the pilgrims' needs prior, during and after their pilgrimage. Started its business in 1963 with only 1281 members and a total deposits of \$15,400 with three branches, Tabung Haji now has grown into a big corporate entity that manages efficiently some 26,000 pilgrims and more than five million depositors and total deposits about \$9 billion. Tabung Haji operates as an alternative financial institution to interest-based banks, providing Halal investment opportunities to Malaysian Muslim savers (Ishak, 2011).

Any Malaysian Muslim can open his or her account with Tabung Haji. The amounts collected are invested in selected investment projects spread across a diverse range of investment portfolios in conformity with Shariah guidelines and strong growth potentials. At present, the total value of its investment is around US\$ 4billion. This includes short and long-term investments, equity investments, unit trust investments, schemes offered by government, real estate investments as well as investments in its 12 subsidiary companies, which are engaged from the traditional sectors of agricultural, plantation or real estate business to the most modern Information Technology. Since 1995, Tabung Haji has been allowed to expand its operating framework, and now it is able to extend its business activities even outside Malaysia (Chachi, 2005).

In the seventies, changes took place in the political climate of many Muslim countries so that there was no longer any strong need to establish Islamic financial institutions under cover. A number of Islamic banks came into existence in the Middle East, e.g., the Dubai Islamic Bank (1975), the Faisal Islamic Bank of Sudan (1977), the Faisal Islamic Bank of Egypt (1977), and the Bahrain Islamic Bank (1979). The Philippine Amanah Bank (PAB) was established in 1973 by Presidential Decree as a specialized banking institution without reference to its Islamic character in the bank's charter. The establishment of the PAB was a response by the Philippines Government to the Muslim rebellion in the south, designed to serve the special banking needs of the Muslim community (Ariff, 1988).

Another interesting argument behind the start of the Islamic financial system is presented by Kuran (1997). He argued that the origins of the Islamic financial sector are a distinct Islamic interpretation of economic development and societal equality. Islamic economics originated in the Muslim world as an ideological paradigm embedded in a context of regional and national struggles for political power and a search for a distinct Islamic identity. Siddiqi (2006) argued that Islamic economics was conceived in the early part of the twentieth century as an antidote to socialism and capitalism i.e., an Islamic response to what were perceived as GOD-less western ideologies. The emphasis was on justice. Freedom from colonial rule, and all that it meant in terms of exploitation and oppression, was to be accompanied by a return to Islam that stood for the elimination of poverty and the reduction of unequal distribution of wealth.

Bassens et al. (2009) also added that, all encompassing model for social, economic and political life, Islamic economics claimed to be another way and an alternative to western economic conceptions. It was thought to avoid the in-egalitarian excesses of modern capitalism, while at the same time unleashing the energies of entrepreneurs and merchants.

Reference should also be made to some Islamic financial institutions established in countries where Muslims are a minority. There was a proliferation of interest-free savings and loan societies in India during the seventies (Siddiqi, 1988). The Islamic Banking System (now called Islamic Finance House), established in Luxembourg in 1978, represents the first attempt at Islamic banking in the Western world. There is also

the Islamic Bank International of Denmark, in Copenhagen, and the Islamic Investment Company has been set up in Melbourne, Australia. (Ariff, 1988)

Today, Islamic banking is estimated to be managing funds of US\$ 1.7 trillion. However, the size is difficult to be measured. Its clientele is not confined to Muslim countries but are also spread over Northern Africa, the Far East, Europe and the United States. An increasing number of conventional banks have opened Islamic windows. These Islamic windows are not independent financial institutions, they are departments within the conventional banks and offer products to comply with Shariah for example; Hong Kong and Shanghai Corporation (HSBC), American Express Bank, Chase Manhattan and others. Islamic bankers, keeping pace with sophisticated techniques and the latest developments, have evolved investment instruments that are both profitable and ethically motivated (Nazim, and Bennie, 2013; Bjorklund and Lundstorm, 2004). Nowadays, there are 360 institutions reported Shariah-compliant activities. Of these 360 institutions, 111 are conventional banks operating semi-separated Shariah windows, while 248 are wholly compliant independent institutions (DiVanna and King, 2015).

### **2.3.2 The Principles of Islamic Banking and Finance**

Islamic finance is a financial system, the fundamental aim of which is to fulfill the teaching of the Holy Quran, as opposed to reaping maximum returns on financial assets. The basic principle in the Shariah (the Islamic common law) is that exploitative contracts based on Riba (interest or usury) or unfair contracts that involve risk or speculation (Gharar) are unenforceable. However, the Holy Quran contains no condemnation of morally acceptable investments that yield fair and legitimate profits and economic/social added value (Siddiqi, 1999).

Although the term *Halal banking* has sometimes been used as a description for *Islamic banking* operations, the broader term Islamic banking has been preferred to signify that the system also stands for the incorporation of the other religious aspects and social goals of the Islamic financial system involving various charitable foundations with spiritual values and social justice, economic development and the alleviation of poverty (Hassan and Lewis, 2007).

Samad (2004) stated that in order to understand the strengths and weaknesses of Islamic banks with regard to its performance, it is essential to know the basic environment in which Islamic banks operate. This different environment is what makes Islamic banking unique and distinguished. According to the Shariah, Islamic financial institutions must be based on four basic principles:

1. All transactions must be interest free i.e., free from Riba. The Quran explicitly prohibits Riba but it does not clearly mention whether Riba is interest in its contemporary form. The lack of clarity led to a controversy among the Muslim scholars in the past. However, there is now a general consensus that the term Riba includes any amount charged over and above the principal. The payment or receipt of interest, which is the fundamental principle of conventional banking and financing, is explicitly prohibited in Islamic banking and finance.
2. Activities or transactions involving speculation (Gharar) must be avoided. Gharar is speculation or gambling and is forbidden in Islam. Islam allows risk-taking in business transactions, but it prohibits speculative activity and gambling. Any transaction involving the element of speculation like buying shares at a low price and selling them at a higher price in the future is considered illegal. Conventional banks, on the other hand, have no constraint in financing investment speculation.
3. The implementation of Zakah, the compulsory Islamic tax. Zakah is a compulsory religious payment or tax on the wealth of the rich payable to the poor. It is a built-in mechanism in Islam for ensuring the redistribution of wealth and the protection of a fair standard of living for the poor. Zakah is one of the five pillars of Islam. Each Islamic bank must establish a Zakah fund and pay Zakah on the profits earned. The payment of Zakah is in addition to any conventional tax imposed. Thus, the Islamic bank pays dual taxes (Zakah and corporate business tax). The interest-based conventional banking system, on the other hand, are subjected to only corporate business tax, and thus have special advantage over the Islamic bank.
4. No involvement in the production or consumption of goods and services which are Haram i.e., illegal from the Islamic point of view. Muslims are not permitted to invest in production, distribution and consumption enterprises involved in alcohol, pork, gambling, illegal drugs etc., even though these enterprises may be profitable. Hence, it is forbidden for an Islamic bank to finance activities or items that are not

permitted by the Shariah. The limitation of investment and financing is extended to cover any activity or business which may be harmful to the individual or the society. Thus, financing investment for the production or consumption of tobacco, alcohol, or pornography is also prohibited. This restriction provides limitation on the profitability of the Islamic banks. On the other hand, conventional banks do not face any such constraint in their financing investments.

The banking services provided by Islamic banks to business customers are mainly confined to letters of guarantee, letters of credit, and current/demand accounts (Karim, 2001). However, this does not mean that Islam frowns on making money or demands that Muslims revert to an all-cash or barter economy, but it means that all parties to a financial transaction share the risk and profit or loss of a venture and no one party to a financial contract gets predetermined return. For example, the depositors in Islamic banks are shareholders who earn dividends when the banks turn profit or lose a portion of their savings if it achieves a loss. In effect, the Islamic financing system functions like western equity financing. This direct correlation between investment and profit differentiates Islamic banking from conventional or western banking (Zaher and Hassan, 2001).

An Islamic bank may be defined as a financial intermediary whose objectives and operations as well as principles and practices must conform to the principles of Islamic law (Shariah) and consequently, is conditioned to operate all its activities without interest. An Islamic bank is not only a financier but also a partner in business. The system essentially involves sharing of risk between the owner of capital and the entrepreneurs as well as sharing the result of the collective efforts (Alam, 2003). In other words, the Islamic bank can be described as a mix of commercial bank and investment bank (Karim, 2001). Islamic banks' general objective is to develop the economy according to Islamic principles (Bjorklund and Lundstorm, 2004).

The main characterization of Islamic banking is that money should be based on equity rather on debt. The idea of a financial structure operating without a rate of interest was odd to many accustomed to a fractional-reserve banking system. The answer lies in the profit or loss system (PLS). Instead of guaranteeing a fixed rate of return (interest), the Islamic bank and the borrower share profits and losses together from the venture to be

financed. Thus, the idea of getting a return for money deposited in a bank is unacceptable in Islam, money must be put in a productive use and risk must be undertaken to justify return (Akacem and Gilliam, 2002).

The prohibition of interest payment under Islamic law (Shariah) stems from the treatment of money strictly as a medium of exchange, i.e. money itself does not have any value, and therefore it should not lead to more money. Even if the money is put in a bank or lent to someone, a certain return shouldn't be derived from it. The provider of the capital (lender) is entitled to rewards from a business venture as long as the provider is also willing to share the burden of losses with the user of the capital (borrower) (Ghannadian and Goswami, 2004).

Islam deems profit, rather than interest, to be closer to its sense of morality and equity because earning profits basically involves sharing risks. Profit-making addresses the Islamic ideals of social justice because both the entrepreneur and the lender share the risk of the investment project (Dhumale and Sapcanin, 1998; Kahf, 1997).

To conclude, Islamic banking advances the following set of beliefs: interest as a reward for saving does not have any basis as a moral foundation; refraining from spending present income does not deserve a financial reward; and to benefit from money is to transform the money into investments, conditioned to accept risks and bringing the knowledge of other factors of production together. According to Ebrahim and Joo (2001), there are 2 prerequisites of Islamic financial contracting:

1. Financial contracts must be clearly documented as quoted in the following verses of the Quran (Quran, 4:29; 2:282). Contractual dealings must be fair with good intentions as stated in the Quran.
2. Islamic financial contracts should be free of components of Riba, Gharar and Maysir.
  - a. Riba is any increase over the value of a loan because it is considered a form of exploitation for either consumption or production. Time doesn't equal money; money shouldn't make money by itself (Bassens et al., 2010).

- b. Gharar (excessive uncertainty) is applied to cases of doubtfulness or uncertainty. It is implied as deception based on the absence of knowledge or the unlikelihood of delivery with the prospect of causing harm (Dhareer, 1997).
- c. Maysir (like gambling) entails speculative elements in a contract where expected gains are not clearly defined at the initiation of the contract (Dhareer, 1997).

While the banning of interest is rooted in the Islamic doctrine, proponents of Islamic finance provide economic rationales to support the ban of interest. Some of these rationales are described by the international association of Islamic banks (1995). First, in an Islamic profit sharing contract, the return on capital will depend on productivity, and the allocation of funds will be primarily based on the soundness of the project. This will improve capital allocation efficiency. Second, the Islamic profit-sharing system will ensure more equitable distribution of wealth and the creation of additional wealth to its owners. This system would no doubt reduce the unjust distribution of wealth under the interest system. Third, the profit-sharing regime may increase the volume of investments and hence create more jobs. The interest regime would accept only those projects whose expected returns are higher than the cost of debt and therefore filter out projects which are otherwise acceptable under the Islamic-profit-sharing system. Fourth, the Islamic finance system will reduce the size of speculation in financial markets but still allow for a secondary market for trading stocks and investment certificates based on profit sharing principles. Fifth, under the profit-sharing model, the supply of money is not allowed to overstep the supply of goods and would thus curb inflationary pressures in the economy (Zaher and Hassan, 2001).

### **2.3.3 The Aims and Objectives of Islamic Banking**

Islamic banks aim to provide banking services that are in accordance with Islamic principles and Shariah and consequently bringing the most benefit to society in terms of equity and prosperity, rather than focusing solely on creating maximum returns on capital. Islamic banks aim to achieve the socio-economic goals of the Islamic religion which are reaching full employment, a high rate of economic growth, equitable

distribution of wealth and income, socio-economic justice, smooth mobilization of investments and savings while ensuring a fair return for all parties and finally, emphasize the stability of money value (Badreldin, 2009; Chapra, 2008; Hassan and Mervyn, 2007).

Moreover, it is emphasized in the Handbook of Islamic Banking (1983) that, the basic objective of Islamic banking is to provide financial facilities by developing financial instruments that conform to the Islamic rules and norms, Shariah (Hassan and Lewis, 2009).

Kahf (2005) argued that the basic principles of Islamic banking are derived from the axioms of justice and harmony with reality on one hand and the human nature on the other hand. He added that the essence of Islamic banking practices is the provision of goods and services while payments for them are delayed to later dates. He also mentioned that Islamic banking also provides means of payments in the form of producers' principal in projects on the basis of sharing the actual, real life outcome of a production process.

One of the most important objectives of Islam is to realize greater justice in human society. This is not permissible unless all human institutions, including the financial system, contribute positively towards this end. One of the principal needs for this is to subject all aspects of human life, social, economic, political and international, to moral values. This will help curb greed which have made maximization of wealth and wanted satisfaction as the highest measure of human achievement (Chapra, 2008).

The financial system may be able to promote justice if, in addition to being strong and stable, it satisfies at least two conditions. One of these is that the financier must also share in the risk so as not to shift the entire burden of losses to the entrepreneur, and the other is that an equitable share of financial resources should become available to the poor to help eliminate poverty, and reduce inequalities of income and wealth (Chapra, 2008). Within the framework of Islamic values, it is not possible to achieve sustainable development without justice. Injustice ultimately leads to destruction (Al-Quran, 57:25).



One of the basic principles of Shariah and Islamic finance is: "No risk, no gain". This condition is essential to the fulfillment of the main objective of Islamic finance which is justice. If a financier wishes to have gain, he must also be prepared to share the risk. Introduction of risk/reward sharing in the financial system should help induce the financial institutions to assess the risks more carefully and to monitor more effectively the use of funds by the borrowers. The double assessment of risks by both the financier and the entrepreneur should help inject greater discipline into the financial system and help in reducing the excessive lending and making the financial system healthier (Chapra, 2008).

Ebrahim and Joo (2001) stated that the main goals of an Islamic banking financial system are to implement the value system of the Quran and the Sunnah in the realm of the Muslim socio-economic system, to foster the growth of the economy of Muslim nations by developing financial markets, financial institutions and instruments and finally, to lessen the shocks of extreme economic output by promoting risk-sharing instruments whose payoffs are strictly contingent on the profitability of a firm or project at a micro level because the financial facilities with fixed costs can severely impair the resources of borrowers during a slowdown which lead to bankruptcies and structural weakening of the economy.

Islam considers the economic activity as a mean to an end and not an end in itself. It urges Muslims to make use of natural resources which are a trust from GOD for carrying out rightful activities but prohibits exploitation and man-made inequalities of income and wealth. Besides, Islam is deeply concerned with the problem of economic development but treats this as an important part of a wider problem, which is total human development. The primary function of Islam is to guide human development on correct lines and in the right direction. It deals with all aspects of economic development but always within the framework of total human development and never in a form separated from this perspective (Ebrahim and Joo, 2001).

#### **2.3.4 The Benefits of an Islamic Banking and Finance System**

Under an Islamic finance system, the real values of assets and liabilities would be equal at all points in time since the nominal values of deposits are not guaranteed. In

contrast to the conventional system which guarantees the values of deposits and consequently, in the short run, there would be a divergence between real assets and liabilities. The Islamic system doesn't need any government intervention to adjust to shocks while the conventional system is in need for such an intervention to correct the disequilibrium between assets and liabilities and if this did not happen divergence will continue leading to a banking crisis (Mohieldin, 1997).

The Islamic banking system does not share in the myopic behavior of banks in times of crisis which take the form of severe competition for deposits by bidding up the interest rates or the rapid reduction of loans to increase reserves at the expense of other banks which may finally lead to insolvency and bankruptcies (Mohieldin, 1997).

Since in the Islamic banking model, the interest rates are replaced with the expected rates of return, Mirakhor (2000) argued that due to the fact that the return to liabilities will be a direct function of the return to assets and also because assets are created in response to investment opportunities in the real sector, the return to financing is removed from the cost side and added to the profit side, thus allowing the rate of return to financing to be determined by productivity in the real sector. Thus, in the Islamic financial system, it will be the real sector that determines the rate of return to the financial sector.

The interest free model of finance can help in lowering the debt burden of the Less Developed Countries (LDCs) through the idea of debt/equity swap. Since the LDCs were increasingly unable to service their debt obligations, in the early 1980s, banks began to sell their debt in the secondary market. Interested banks, multinationals and investors can buy LDCs debt in the secondary market at a discount and convert it into equity in the debtor's country (Akacem and Gilliam, 2002). Islamic banks should take the lead and step in to consider taking equity in various projects in developing countries. Many developing countries could benefit from a debt/equity swap program facilitated by the leading Islamic banks since these economies suffer from the classical economic problems affecting most LDCs. The argument behind the adoption of this approach is the time given to the economies of developing countries to allow them to reform and grow. Though, the debt/equity swaps is an ideal investment for Islamic banks, yet, it has to be embraced.

Another secondary benefit relates to a diminished reliance on a country's level of international reserves. Since most non-oil LDCs rely on hard-currency earnings from their exports of a single or few commodities, their economies become subject to external shocks whenever their term of trade turns against them. In such cases, those countries have no way out other than resorting to commercial borrowing which, finally, increases their debt burden. However, if Islamic banks become partners with those LDCs, they will share the profits from a venture and the LDCs will not be forced to pay any principal nor interest and this will lead, at the end, to a decrease in the debt burden (Akacem and Gilliam, 2002).

Concerning the idea of socioeconomic justice; supporters of the interest-based financial system argue that interest was prohibited to prevent the exploitation of the poor resulting from the extremely high rates of interest prevailing in those days. In addition, they argue that rates of interest are much lower nowadays and the modern welfare state has also introduced a number of measures to fulfill the needs of the poor and prevent them from resorting to exploitative borrowing. Even though this is true to a certain extent, the living beyond means that the interest-based system promotes in both the public and private sectors leads to an indirect exploitation of the poor in different ways (Chapra, 2007).

Firstly, the conventional banks tend to allocate financial resources among borrowers primarily on the basis of their ability to guarantee the repayment of principal and the sufficiency of cash flow to service the debt. Although, the conditions related to the collateral and cash flows are very important, however, it does not constitute the main criterion and it ignores the real purpose for which borrowing essentially took place. Hence, financial resources go mainly to the rich who own the collateral and the cash flows. Also, the ease of borrowing has enabled a number of developing countries to borrow excessively large amounts. The debt-servicing burden continues to rise with the rise in debt and becomes unbearable, particularly, if the borrowed amount is not used productively. The result is that those governments are unable to provide adequate budgetary resources for some of the most important national needs like education, health, infrastructure projects, and rural and urban development. So, it is crystal clear that primarily the poor and the lower middle classes are the ones who suffer as a result

of that. Poverty does not get reduced, and inequalities of income and wealth continue to rise (Chapra, 2007).

The ease of borrowing also creates problems for rich countries too. For example, the collapse of the U.S. hedge fund long term capital management (LTCM) in 1998 which was due to highly leveraged short-term lending. Many of the top commercial banks in the U.S.A., which are supervised by the Federal Reserve and considered to be healthy and sound, had lent huge amounts to these funds. The LTCM suffered huge losses that eroded its equity from \$4.8 billion to just \$600 million leading to an increase in the leverage up to 167 times capital (IMF, 1998).

Secondly, one of the most important pre-requisites for overcoming the unemployment problem is the increase in the savings level in the economy which is necessary to be achieved in a non-inflationary manner and without a rise in foreign debt. Unfortunately, there has been a decline in savings in almost all countries around the world. Chapra (2007) argues that, there are a number of reasons for this general trend worldwide. One of these is the living beyond means by both the public and the private sectors. This saving shortfall has been responsible for persistently high levels of real interest rates which consequently lead to a decrease in the investment level. This decline in the investment, eventually, affects the employment rate of many developing as well as industrial countries. But, if banks are required to share in the risks and rewards of financing and credit is made available, basically, for the purchase of real goods and services, which the Islamic system tries to ensure, the banks will be more careful in lending and credit expansion will tend to be in step with the growth of the economy. As a consequence, unproductive and speculative spending may decline and make it possible for more resources to become available for productive investment and development and this will finally result in a higher growth rate in output and employment and a decline in unemployment.

### **2.3.5 The Monetary Policies and the Central Bank in an Islamic Context**

The central bank is the government's bank as it keeps the deposits of the government and advances loans to it. The central bank performs an important role in regulating commercial banks and their various activities (Ahmad, 2000). The central

bank is able to control the volume of money in the economy by affecting the money supply or monetary aggregate to control the amount of money that commercial banks lend to people (Kiaee, 2007).

The central bank is considered a banker's bank as commercial banks keep their deposits with it and it may advance loans to them at the time of a need by functioning as the lender of last resort. While all these functions constitute important dimensions of central banking operations, probably the most important task of a central bank is to control the credit created by commercial banks. This is a lever through which the monetary policy of the country is devised and implemented. The techniques to which central banks resort to control commercial banks' credit creation include: legal reserve ratio, bank rate or discount rate policy, open market operations, qualitative or selective credit control and moral suasion (Ahmad, 2000).

The purpose of imposing a legal reserve ratio is not to make deposits safer or to keep banks liquid only. Rather, its main objective is to control the credit creating capacity of commercial banks. The commercial banking system has the capacity to create credit at several times the reserve ratio. Thus, by raising or lowering the reserve ratio, the central bank can reduce or increase the credit creating capacity of commercial banks. The discount rate or the bank rate is the interest charged by central banks on any advances made to commercial banks. By introducing variations in the bank rate, the central bank controls the price of the credit created by commercial banks. Consequently, the demand for credit can be lowered or increased due to the changes in the central bank rate. Open market operations refer to the purchase and sale of government securities by central banks, other financial institutions and individuals in the open market. By buying and selling securities in the open market, the central bank can expand or contract the reserves of commercial banks, and thus, influence their credit creating capacity (Ahmad, 2000).

Under the Islamic system, banking operations will undoubtedly be more varied and complex, as compared to the traditional banking system. However, almost all economists writing on this subject are in agreement that the central bank in an Islamic economy would continue to perform all those functions performed by central banks elsewhere (Ahmad, 2000; Ahmed, 1989).

According to Iqbal and Mirakhor (1987), the main task of central banking in an Islamic financial system is the provision of an institutional framework necessary for the smooth operation of financial markets in compliance with the rules of the Shariah. The central bank would need to take the lead in promoting Islamic financial institutions, deposit and loan instruments, and a yield structure conducive to the efficient mobilization of savings and allocation of resources. Another function of the monetary authorities is the enforcement of Islamic regulations concerning contracts and property rights. Such enforcement reduces the uncertainties that tend to discourage private investment and encourage lending of funds on the basis of viability and profitability of investment projects rather than the solvency, creditworthiness or collateral strength of entrepreneurs.

Iqbal and Mirakhor (1987) argued that, the usual regulatory, supervisory and control functions of the central bank with regard to the banking system could be expected to be continued and reinforced in an Islamic financial system. Furthermore, according to Khan and Mirakhor (1989), the regulation and control of commercial banks is always within the framework of a monetary policy in which certain instruments and tools are used to achieve predetermined goals. To achieve its policy objectives, the central bank has control over the supply of high-powered money, the reserve ratios on the different types of liabilities, and the maximum amounts of assets which the banks can allocate to their profit sharing activities.

A further opportunity for enhancement of the control over the banking system is available to the central bank through its purchases of equity shares of banks and other financial intermediaries. Through performance of its regulatory, supervisory, and control functions, as well as its lender-of-last-resort role, the central bank can continue to exert substantial influence on the financial system. Moreover, opportunities will exist for the central bank to invest directly in the real sector on a profit sharing basis, as well as to take equity positions in joint ventures along with other banks (Khan and Mirakhor, 1989).

Additionally, the suggestion has been made that the central bank can regulate profit sharing ratios between the banks and borrowers on the one hand, and the banks and depositors on the other. Variations in these ratios will change the rates of return and

could have the same impact as interest rates on the overall flows of financial resources. While the adoption of this policy instrument would undoubtedly strengthen the control of the monetary authorities over the volume of credit creation, it would affect resource allocation and put limitations on the freedom of contracts and on the sharing of losses by partners (Iqbal and Mirakhor, 1987). There is, however, debate on whether such a policy is valid, since it represents a limitation on the freedom of contract and may be inequitable. The issue of inequity would arise if the profit sharing rules imposed by the central bank required, say, a lower return from profits than the share in losses (Khan and Mirakhor, 1989).

One of the most important and crucial functions of the central bank is his role as the lender of the last resort to commercial banks, i.e., if any commercial bank faces a liquidity problem and is short of cash, the central bank may bail it out by providing it with an appropriate loan. In an interest based economy, such loans are provided on the basis of interest. In an Islamic economy, the central bank could perform this function by providing interest free loans (Qard Hassan) with or without service charge (Ahmad, 2000).

### **2.3.6 The Operational Framework of Islamic Banking**

#### **2.3.6.1 Shariah Principles of Operations**

Each Islamic bank must establish an in-house Shariah committee to ensure that the Islamic banks' transactions and activities are in compliance with the teaching of Islam and the Shariah. The Shariah committee consists of individuals who are experts in the Islamic Fiqh Al-Muamalat (Islamic commercial Jurisprudence). The Shariah committee should have five different activities: 1) certifying permissible financial instruments through Fatwas (religious opinions), 2) verifying that the transactions comply with issued Fatwas, 3) calculating and paying Zakah, 4) disposing of non-Shariah-compliant earnings and, 5) advising on the distribution of income or expenses among shareholders and investment account holders. The committee also should issue a report to certify that all financial activities and transactions are in compliance with Shariah principles (Olson and Zoubi, 2008).

Additionally, many Islamic banks usually work within a traditional banking environment, and have working relationships with traditional banks. Therefore, they often accumulate interest balances in their accounts with traditional banks. According to the Islamic Shariah, earned interest cannot be considered an income and it is to be disposed of to the poor in a way that does not directly benefit the bank. Hence, those Islamic banks that happen to earn interests spend them on benevolent social activities. In other words, while profit maximization is equally essential to Islamic banks as other conventional banks, the underlying philosophy of these financial institutions is conducive toward social commitment and activities that usually cannot be interpreted by the motive of profit maximization (Kahf et al., 1998).

Contemporary Islamic banks have been founded on the banking model that existed in Europe and North America, with regard to their main layout, departmental structure and their basic functions of mobilizing financial resources and using them to finance those who are in need for investible funds. Obviously, the difference lies in the area of modes of financing that are, in the case of Islamic banks, derived from the Islamic system and structured within the Islamic legal framework (Kahf, 2005).

#### **2.3.6.2 The Investment and Financing of an Islamic Bank**

There is a large argument about the idea that Islamic banking merely modifies conventional financing in such a way to satisfy the Shariah scholars, that is why a question is raised about what remains distinctive about the Islamic system? In short, what is the essential point of departure between the two systems? Should the adaptive devices come to dominate the system and be regarded just as legal fictions (hiyal)? There is a danger that Islamic banking looks like an issue of branding like Mecca Cola instead of Coca Cola (Hassan and Lewis, 2007).

The large debates and arguments about whether Islamic banking and finance is an alternative approach to modern banking will last for a long time. However, the banking business, in general, is no more than a possible means to satisfy the needs of society according to the prevailing conditions and circumstances. Islamic banking is a system that provides financing and attracts savings on the basis of profit and loss sharing in contrast to the conventional banking system based on interest paid and charged. For



Muslims, this system coincides with their belief in the prohibition of interest and helps in mobilizing unused funds for investment and creating new job opportunities. As for non-Muslims, the Islamic banking system does not contradict their faith, while it provides the society with alternative ideas for venture capital and other tools of investment. However, it can be noticed that the idea of Islamic banking has been widely acceptable and favorable. The evidence is that several international banking institutions started the establishment of Islamic banks or windows. Islamic banking is practiced nowadays by some western banks and financial institutions in Switzerland, United Kingdom and the United states (Kahf et al., 1998).

A country's financial system including banks is important for financial development and prosperity. Playing the role of a financial intermediary, banks can help the economy by collecting or pooling deposits from small deposit holders and making large sums of money available to borrowers and entrepreneurs to use it (Brown, 2003).

Financial intermediation is the major function of the modern banking system; it is and probably the *raison d'être* of banks. In conventional banks, this is performed on the basis of loan contracts. Banks borrow funds from those who have extra and lend them to those who need them for use in their production projects or in buying consumable goods and services. Islamic banks perform also the same role of financial intermediation by collecting savings from those who have surplus and distribute them to entrepreneurs and consumers who need them to finance their purchases of goods and services. However, Islamic banks make their financial intermediation on the basis of several contracts that do not include lending and borrowing because interest is prohibited in the Islamic law. Instead of the loan contract, Islamic banks rely on a combination of three principles: sharing, leasing and sale. What is essential in their function of financial intermediation is that Islamic banks leave the initiative of investment and use of funds to the entrepreneurs and other users of funds (Kahf, 2005).

Commonly, the main purpose of a financial system is to facilitate the flow of funds from savings-surplus-units to savings-deficit-units in the most efficient manner and commercial banks play this important role as an intermediary. In the absence of intermediaries, the flow of funds would have to be direct from the lenders to the borrowers and such direct financing has many problems like the absence of double

coincidence in terms of maturity for example. Commercial banks play their vital role as financial intermediaries and intervene between the two groups to solve such problems and allocate funds in the most efficient way (Obaidullah, 2005).

According to Obaidullah (2005), commercial banks perform four basic services:

1. They are able to produce a wide range of denominations by pooling funds of many individuals and investing them in direct securities of varying sizes.
2. They are able to create securities with a wide range of maturities.
3. They are able to spread risk by investing in a wide range of assets.
4. They are able to provide liquidity by lowering the transactions costs associated with converting financial assets into money.

In an interest-based banking model, the interest rate is the variable that determines the demand and the supply of money and this conveys information concerning the overall market, thus, it helps reduce the information searching cost for alternative financing schemes. On the other hand, the profit-sharing mode of finance does not provide a systematic mechanism by which these profit shares are arrived at. As a result, the search for the most profitable investment alternative under this model will most likely take longer and will probably be costly. An added cost to the Islamic banks that conventional banks do not have is their obligation to monitor projects in which they are partners more closely and this requires managerial skills and expertise (Akacem and Gilliam, 2002).

Under the Islamic system, banking operations are different compared to the traditional banking system. In terms of profit sharing activities, the criteria of credit-worthiness of the borrower that underlies conventional banking systems will have to be changed to place more emphasis on the viability and profitability of the specific project being proposed. In addition, there will be a structure of returns for different economic activities that banks have to consider. Project evaluation and appraisal, determination of profit sharing ratios and the establishment of a procedural framework for the processing, monitoring, supervision, and auditing of various projects will create new demands on commercial banks. On the liability side, banks would have to attract depositors on the

basis of profits and dividends, rather than through interest rates. In short, commercial banks in an Islamic system would have to be transformed into institutions that would closely resemble investment banks in western financial systems (Khan and Mirakhor, 1989).

One of the main principles of Islamic banking is risk sharing, meaning that Islamic banks should operate only using profit/loss sharing arrangements. The entrepreneurs share the profit or loss with the Islamic bank according to an agreed upon ratio. The bank then pools all profits and losses from different investments and shares the profit with depositors of funds according to a predetermined percentage. Islamic banks are partners with both depositors and entrepreneurs and they share risk with both (Olson and Zoubi, 2008).

Islamic banks replace loans with investments that are generally riskier than secured interest-based loans. Entrepreneurs wanting funds under these arrangements must document the feasibility of projects to be undertaken with these funds. The cost of capital in conventional banks represents the cost of debt and equity. The cost of capital in Islamic banks is replaced by profit and loss sharing by depositors and equity holders in Islamic banks. Return on equity is more variable than for conventional banks. Nevertheless, the failure to reward depositors could lead to a substantial withdrawal of deposits and the risk of bankruptcy (Olson and Zoubi, 2008).

Table (2.1) provides a synoptic comparison between the Islamic and conventional banking. This comparison was performed by Errico and Farahbaksh in 1998.

#### **2.3.6.2.1 Sources of funds**

The sources of funds in an Islamic bank are classified into two types of deposits which are: transaction or demand deposits and investment deposits.

**Transactions deposits** are essentially similar to checking accounts. In both, the Islamic bank and the conventional bank, the face value of deposits is guaranteed. Similarly, there are no returns on this type of account, and a service charge may be charged. However, the Islamic bank differs from the conventional bank in the use of these accounts. The money rose through the transactions deposits cannot be used in any risky

investment at all. Each type of banks guarantee the face value of the deposits in a different manner, the conventional bank through the deposit insurance while the Islamic bank through the restriction imposed on the use of funds collected through the transaction accounts. Normally, keeping excess liquidity available for usage on hand is the main motive for customers to open such kind of even if they do not earn any profit or income (Bjorklund and lundstrom, 2004; Akacem and Gilliam, 2002; Ahmad, 1993).

***Investment accounts*** are the second source of funds. It is the most important type of accounts for the Islamic banks. Investment accounts are not similar to traditional saving deposits. They do not earn a fixed or predetermined rate of return or interest. Rather, investment accounts are nothing more than shares or equity. Thus, their face value is not guaranteed, unlike saving accounts in the traditional banking system. Customers, who are risk takers and want to save some funds and to earn some income, mostly invest in this type of accounts. Holders of these accounts will share the profits and losses with the bank according to the performance of the different joint ventures. The only guarantee that the holder of an investment account receives is the proportion of the profits and losses that are to be divided between the investor and the bank. This ratio is agreed upon in advance and cannot be changed during the life of the contract (Aburime and Alio, 2009; Ahmad, 1993).

#### **2.3.6.2.2 Uses of funds**

In conventional banking model, a major part of a bank's profitability is in making loans and earning interest on them. However, instead of making loans, an Islamic bank has certain types of trade modes which are permissible as Islamic modes of finance in Islam.

**Table (2.1): Comparison between the Islamic and Conventional Banking**

<b>Characteristics</b>	<b>Islamic Banking</b>	<b>Conventional Banking</b>
Nominal value guarantee of:		
Demand Deposits	Yes	Yes
Investment Deposits	No	Yes
Equity-based system where capital is at risk	Yes	Yes
Rate of Return on deposits	Uncertain, not guaranteed	Certain and guaranteed
Mechanism to regulate final returns on deposits	Depending on banks performance/profits from investment	Irrespective of banks performance/profits from investment
Profit & Loss Sharing principle is applied	Yes	No
Use of Islamic modes of financing PLS and non-PLS modes	Yes	Not Available
Use of discretion by banks with regard to collateral	Possible for reading moral hazard in PLS modes.  Yes in non-PLS modes	Yes always
Banks' pooling of depositors' funds to provide depositors with professional investment management	Yes	No

Source: Comparison of Islamic and Conventional banking practices by Errico and Farahbaksh (1998).

Most types of trade (buying and selling) are permitted in Islam, where prohibition is the notable exception. A valid trade is conducted in Islam if the seller and buyer agree on exchanging an offer and specify the object of sale and its price. Therefore, any financing through valid trading by mutual consent is permissible and allowed. However, since most Muslims lack sufficient knowledge regarding the various conditions for a sale transaction to be valid, contemporary jurists and financial practitioners have limited Islamic banking and finance to a few named contracts. Those contracts had been studied

extensively by jurists over the centuries, and whose validity is well established through the Prophet Muhammad's (Peace be upon him) own actions (Sunnah), or consensus of the early Muslim communities and jurists (Ijama'). To further add credibility to the industry, the Arabic names for those contracts are often used instead of its English counterpart (El-Gamal, 2000).

The literature separates Islamic banking contracts into profit and loss sharing contracts and non-profit and loss sharing contracts (Dhumale and Sapcanin, 1999).

Chapra (2007) classified the profit and loss sharing (PLS) financing modes into three types which are Mudarabah (Partnership), Musharakah (equity participation) and Musaqat (orchard financing) and Muzarah (share of harvest) where the financier takes share in joint stock companies or participates in profits or losses in a variety of entrepreneurial projects or ventures on a partnership basis. Moreover, Chapra added that the Non Profit loss sharing contracts are indispensable and in practice constitutes the greater part of Islamic finance. It involves Murabahah (cost plus markup), Ijarah wa Iqtina' (leasing contracts), Bai Mu'jjal and Bai'salam (sales contracts), Istisna and Jo'ala (service charges) as well as other sales-based financing modes. These are less risky than PLS financing because the rate of return is fixed in advance and built into the deferred payment price on a cost-plus (mark-up) basis.

### **2.3.6.3 Profit And Loss Sharing (PLS) Schemes**

PLS is a contractual arrangement between two or more transacting parties, which allows them to pool their resources to invest in a project to share in profit and loss. Most Islamic economists contend that PLS are mainly based on two major modes of financing namely Mudarabah and Musharakah which constitute, at least in principle if not in practice, the twin pillars of Islamic banking (Ariff, 1988).

#### **2.3.6.3.1 Mudarabah Contracts**

It can be translated as a trustee finance contract or trust financing. The bank, or any other money provider, provides the entire capital needed for financing a project and the other party, the mudarib or agent, manages the venture through labor, expertise, entrepreneurial and managerial abilities (Visser, 2007). The capital provider is similar to

a silent partner because he does not participate in the management of the enterprise nor is he allowed to request collateral to reduce his credit risk (Shahinpoor, 2009).

The profits from the joint venture are shared by both parties on a pre-agreed percentage, but in the case of losses, the total loss is borne by the bank as he is the owner and provider of capital (Chong and Liu, 2009). The two parties agree beforehand on the proportions in which they share any profits as a percentage of the profit but not as a lump sum. Moreover, the mudarib is entitled to deduct its management fee from the enterprise profits. While in the case of any loss, the entrepreneur or the mudarib cannot share any loss because in Islam one cannot lose what one does not contribute and the mudarib contributed only time and effort and these, what he will lose only but the bank has to bear all the losses unless the loss has resulted from negligence on the part of the entrepreneur (Visser, 2007; Hussein, 2004; Zaher and Hassan, 2001). Yet, the issue related to mismanagement and negligence leaves the door wide open for an unscrupulous or careless money manager to engage in questionable transactions leading to losses or even failure of the enterprise (Zaman and Movassaghi, 2001).

The Mudarabah contracts are usually employed in investment projects with short development periods and in trade and commerce (Shahinpoor, 2009). In effect, practically, in the case of Mudarabah, the depositor of the bank enters into what is called an unrestricted Mudarabah contract with the bank because depositors agree that their funds be used by the bank to finance open-ended list of profitable investments and expect to share with the bank the overall profits accruing to the bank's business. The contract specifies the kind of activity to be pursued by the bank, duration and location; the bank in turn gives this capital to entrepreneurs in a restricted Mudarabah contract where the bank agrees to finance a specific project carried out by the entrepreneur and to share the relative profits according to a certain percentage. In case of losses, the depositors only lose the principal of their deposits that the bank invested in the project (Nomani, 2003).

#### **2.3.6.3.2 Musharakah Contracts**

The Musharakah contract is a form of equity participation or partnership financing. Both profits and losses are shared according to a predetermined percentage,

usually according to each partner's share in the firm's equity capital. The Musharakah contract is not only a profit-sharing contract but also a loss-sharing contract. This is more or less the ideal of Islamic finance (Visser, 2007). Usually, losses in Musharakah contracts are borne in the exact proportions of the capital invested by each party, while the profit sharing ratio is left to mutual agreement between the partners, which may differ from capital contribution (Albalawi, 2006). This type of transaction has traditionally been used to finance medium and long-term investments. In this type of investments, banks have the legal right and authority to participate in the management of the project, including sitting on the board of directors. Each investor's rights correspond to their amount of equity capital in the enterprise (Dhumale and Sapcanin, 1999).

Musharakah can be divided into three types: commercial Musharakah, decreasing participation or diminishing Musharakah and permanent participation. In commercial Musharakah, the bank's main goal is to help finance the venture, provide necessary banking services like the opening of letters of credit and to monitor progress through the account and progress reports. Commercial Musharakah is favored by banks because of its short and generally predetermined duration and high percent returns (Albalawi, 2006). Diminishing partnership is defined as a partnership whereby the bank agrees to allow the partner to gradually gain ownership of the project. This type of Musharakah is common in new industrial and agricultural projects. Throughout the bank's Musharakah contract, the bank receives an agreed upon percent of the profit, which includes a gradual repayment of the bank's share of the capital (El-Gamal, 2000). In permanent participation, the Musharakah contract is partly financed by the bank, which enters the venture as a shareholder. Subsequently, the bank participates in the management and supervision of the project and shares in the profits and losses. By permanent, it is meant that the bank participates in the project till it comes to an end or until the agreed upon time in the contract (Albalawi, 2006; Saeed, 1996).

#### **2.3.6.3.3 Musaqt and Muzarah Contracts**

Musaqt is a specific type of Musharakah contract for orchard keeping. In this case, the harvest is divided and shared among all the equity partners according to their contributions. In this case, the financier or the bank provides the land and the farmer



takes care of planting and harvesting the fruit trees (Shahinpoor, 2009). While the Muzarah contract is essentially a Mudarabah contract in farming, where, the bank can provide land or funds in returns for a share of the harvest (Dhumale and Sapcanin, 1999).

Note that the above profit and loss sharing modes of finance are direct investment methods and they resemble to transactions in western conventional banking and thus require the greatest discretion. Islamic banks cannot invest in the production of any good or service that might even appear contrary to the ethical and moral values of Islam (Dhumale and Sapcanin, 1999).

Whatever is the degree of success of individual Islamic banks, they have so far failed in adopting PLS-based modes of financing in their business (Dar and Presley, 2001). According to the International Association of Islamic Banks, PLS schemes covered less than 20% of investments made by Islamic banks worldwide, according to the figures of 1996.

According to Dar and Presley (2001), there are different explanations exist for this lack of PLS:

1. PLS contracts are inherently vulnerable to agency problems as entrepreneurs have disincentives to put in effort and have incentives to report less profit as compared to the self-financing owner-manager. This argument is based on the idea that parties to a business transaction will evade from the business partnership if they are compensated less than their marginal contribution in the production process, and as this happens in the case of PLS, the capitalists hesitate to invest on PLS basis.
2. PLS contracts require well defined property rights to function efficiently. As in most Muslim countries, property rights are not properly defined or protected, PLS contracts are deemed to be less attractive or fail if used.
3. Islamic banks and investments companies have to offer relatively less risky modes of financing as compared to Mudarabah or Musharakah in the wake of severe competition from conventional banks and other financial institutions, which are already established and more competitive.

4. Equity financing is not feasible for funding short-term projects due to the ensuring high degree of risk. This makes Islamic banks and other financial institutions rely on some other debt-like modes, especially markup to ensure a certain degree of liquidity.
5. Unfair treatment in taxation is also considered in the use of PLS. while profit is taxed, interest is exempted on the ground that it constitutes a cost item. This legal discrimination and its associated problem make PLS less reliable as a tool for reward sharing.
6. Secondary markets for trading in Islamic financial instruments, particularly Mudarabah and Musharakah, are nonexistent. Consequently, they have so far failed to effectively mobilize financial resources.

#### **2.3.6.4 Non-Profit and Loss Sharing Schemes**

Chapra (2008) mentioned that greater reliance on equity does not necessarily mean that debt financing is ruled out. This is because all financial needs of individuals, firms or governments cannot be made tailored through the use of equity and profit and loss sharing. Debt is, therefore, indispensable, but should not be promoted for inessential and wasteful consumption and unproductive speculation. For this purpose, the Islamic financial system does not allow the creation of debt through direct lending and borrowing. It rather requires the creation of debt through the sale or lease of real assets through its sales- and leased- based modes of financing. The purpose is to enable an individual or firm to buy now the urgently needed real goods and services in conformity with his ability to make the payment later. Islam has, however, laid down certain conditions that would help prevent excessive expansion of debt. Some of these are:

1. The asset which is being sold or leased must be real and not imaginary or notional.
2. The seller must own and possess the goods being sold or leased.
3. The transaction must be a genuine trade transaction with full intention of giving and taking delivery.
4. The debt cannot be sold and thus the risk associated with it cannot be transferred to someone else. It must be borne by the creditor himself.

According to Chapra (2008), the first condition will help eliminate most of the speculative transactions which involve Gharar (excessive uncertainty) and Qimar (Gambling) while the second condition will help ensure that the seller or the lessor also shares a part of the risk to be able to get a share in the return. The third and fourth conditions will also help eliminate speculative and derivative transactions and also prevent the debt from rising far above the size of the real economy and consequently, helps releasing a greater volume of financial resources for the real sector and thus, helps in expanding employment and self-employment opportunities.

Surprisingly, some of the Islamic financial instruments that are very popular among Islamic banks and their clients and are recognized as legal by many jurists are controversial for purist Islamic intellectuals (Nomani, 2003). El-Gamal (2007) argued that the Islamic finance industry has retrogressed into one that is mostly dominated by form over substance, the chief aim of which is to circumvent, rather than comply in any meaningful way, with the Quranic injunctions against Riba (interest) and Gharar (excessive uncertainty). The aim is realized when conventional lending practices are replicated in Islamically acceptable ways in the balance sheets of Islamic financial institutions; a process that he calls Shariah arbitrage. Those controversial modes of finance are represented in the non-profit and loss sharing contracts.

#### **2.3.6.4.1 Murabahah Contracts**

The Murabahah contract is cost-plus or markup financing where the bank buys goods for its own account and sells these on deferred-payment basis to the client at the original price plus a markup. Repayment is usually in installments. The markup is considered as a payment for the services provided by the bank and viewed also as a guaranteed profit margin (Visser, 2007).

Murabahah is one of the most important, if not the most important, instruments of investment in today's Islamic banking. Murabahah contracts are used by banks as means of short-term finance to clients who are buying goods even though they lack the cash to pay for them. The popularity of Murabahah contracts, which constitute approximately 75% of financing methods in Islamic banking, is attributed to their being short-term investments hence less risky (Albalawi, 2006). The client, here, takes the

responsibility of negotiating all of the key commercial terms with the seller of the asset. The markup on the asset cannot be altered during the life of the contract. The size of the markup is determined in relation to an interest rate index such as the LIBOR (London Inter-Bank Offered Rate) and is also a function of the client's credit rating, the transaction's size and the type of goods being financed. The Murabahah deals offer enough flexibility to be used in real estate and project financing but historically it has been used primarily for trade finance (Zaher and Hassan, 2001).

#### **2.3.6.4.2 Ijarah Contracts**

Ijarah is another non profit and loss sharing transactions used in about 15% of total methods of Islamic finance and it is the fastest growing non-Murabahah contract and an acceptable, though controversial, form of Islamic modes of finance (Albalawi, 2006; Hussein, 2004). The Ijarah contract is a leasing contract where the bank purchases the required item and leases it back to its client. The Ijarah contract is similar to conventional lease, where in an Islamic bank (lessor) leases the asset to a client (lessee) for agreed upon lease payments for a specified period of time, but with no option of ownership for the lessee. The maintenance and insurance of the leased asset is the lessor's responsibility (Zaher and Hassan, 2001).

The most important financial difference between Islamically permitted leasing and conventional leasing is that the leasing agency which is the Islamic bank in this case must own the leased object for the duration of the lease (El-Gamal, 2000). El-Gamal (2000, p.14) argues that "it is no secret that the Islamic bank or the financial institution will take into consideration the same factors when determining the rental payments and residual value that a regular bank would consider. Of course, an implicit interest rate can be calculated from the price, residual value, term of the lease and the lease payment. However, in the final analysis, the difference will be in the form of the contract. If the lease is structured in accordance with the various conditions detailed in books of jurisprudence, it will contain no Riba and will ensure that it cannot contain such forbidden Riba in the future".

One derived innovation from the Ijara or lease contract is Ijarah wa Iqtina' or Islamic hire purchase mode of financing. Islamic hire purchase is a unique contract involving a

combination of leasing (Ijara) and sale at different stages of the transaction (El-Din and Abdullah, 2007). Under Ijara wa Iqtina, each payment constitutes a portion that goes toward the final purchase and transfer of ownership of the product. The lessor bears any liabilities emerging from the ownership of the leased object (Visser, 2007). The conditions governing both types of leasing are that assets must have a long and secure productive life and must not be handled in an un-Islamic way, meaning that the lease payments must be agreed upon in advance to avoid speculation (Zaher and Hassan, 2001).

#### **2.3.6.4.3 Bai' Muajjal Contracts**

It is a sale contract, which is variation of Murabahah (cost plus financing), which is structured on the basis of a deferred payment sale, whereby the delivery of goods is immediate and the repayment of the price is deferred on an installment or lump-sum basis. The price of the product is agreed upon at the time of the sale and can not include any charge for deferring payments. This contract has been used for house and property financing (Chong and Liu, 2009; Errico and Farahbaksh, 1998).

Note that, Bai-Mu'ajjal simply implies deferment of payment of price irrespective of whether the cost and mark-up are known to parties or not. In a Murabahah, both parties to the transaction must know the cost and the profit or mark-up (Obaidullah, 2005).

#### **2.3.6.4.4 Bai' Salam Contracts**

Salam is a sale contract whereby the seller promises to supply some specific goods to the buyer at a future date in exchange of an advanced price fully paid at spot. Salam was allowed by the Prophet Muhammad (peace be upon him) subject to certain conditions. The basic purpose of this sale was to meet the needs of traders or small farmers who needed money to grow their crops and to feed their families up to the time of harvest. Therefore, it was allowed to them to sell the agricultural products in advance (Al-Jarhi and Iqbal, 2001). This contract is structured based on a forward sale concept (Chong and Liu, 2009). This mode of financing can be used by modern banks and financial institutions, especially to finance the agricultural sector. The price in Salam may be fixed at a lower rate than the price of those commodities delivered at spot. In

this way, the difference between the two prices may be a valid profit for the banks (Warde, 2000).

#### **2.3.6.4.5 Istisna' Contracts**

It is a new concept in modern Islamic finance. These type of contracts are based on the concept of commissioned or contract manufacturing, whereby a party undertakes to produce a specific good for future delivery at a pre-determined price. It can be used in the manufactured goods, construction and infrastructure projects (Chong and liu, 2009; Bjorklund and Lundstorm, 2004; Warde, 2000). The unique feature of Istisna' is that nothing is exchanged on spot or at the time of contracting. It is a pure and perhaps the only forward contract where the obligations of both parties relate to the future (Obaidullah, 2005).

Istisna' consists of two separate contracts. The first is done between the beneficiary and the bank, in which the price is payable by the beneficiary in the future in agreed upon installments and the bank promises to deliver the requested manufactured commodity at an agreed upon time, the second contract is a subcontract concluded between the bank and a contractor to manufacture the product according to the prescribed specifications (Al-Jarhi and Iqbal, 2001). This form of financing is rarely used and is considered one kind of Islamic forwards. In general, the sale of non-existent objects is forbidden due to Gharar (excessive uncertainty). However, to facilitate certain type of business, exceptions were given through this contract. As such, those considering the use of such contract must consult an Islamic legal expert to construct the Istisna' contract in such a way to meet all the necessary conditions for it to be Islamically valid (El-Gamal, 2000).

#### **2.3.6.4.6 Jo'alah**

They are service charges that usually occur during transactions of various services. They often occur when the buyer of a service agrees to pay the provider a specified fee according to a contract (Dhumale and Sapcanin, 1999). Obaidullah (2005) stated that Islamic banks, like their conventional counterparts, provide fee-based services, such as:

- i. Safe-keeping of negotiable instruments including shares and bonds and collection of payments (based on an agreement of *Wakala* under which the Islamic bank acts as the *wakil* or agent of its client);
- ii. Internal (domestic) and external transfer operations; (based on an agreement of *Wakala* under which the Islamic bank acts as the *wakil* or agent of its client),
- iii. Hiring strong boxes (coffers) based on an agreement of *Amana* or *Ijara*;
- iv. Administration of property, estates and wills etc. (based on an agreement of *Wakala* under which the Islamic bank acts as the *wakil* or agent of its client)

Of late Islamic banks have started offering various services related to real estate, property and project management. They are called Ujr. Ujr are fee-based services that are offered to customers regardless of whether they utilize financing services or not (Haron, 1998).

#### **2.3.6.4.7 Qard Hassan**

It is an interest-free loan provided by many Islamic banks, primarily for welfare expenditure it may be returned back by the borrower to the bank or not depending on the banking system and its regulations (Khan and Prodhan, 1992). Obaidullah (2005) mentioned that it is a benevolent loan and it is the simplest of all financing schemes. Under this scheme, a borrower in need of a specific amount of funds borrows the same from a lender as *Qard Hassan* with or without a clear specification regarding the maturity or the repayment date. The loan is repaid without an increment or interest. According to Shahinpoor (2009), when no maturity is predetermined, the loan is repaid when asked by the lender, again without any increment. In this case, the bank is allowed to charge a service charge for administration of the loan. These loans are often given to charitable organizations or people with sudden or unexpected need for funds like in case of sudden death, health problems or natural disasters.

#### **2.3.6.5 The Alternative Models of an Islamic Bank**

Since the 1980s, a number of economists have been concerned with developing analytical models of banking in an Islamic environment. Basically, these efforts have yielded two complementary models. The first model is relying on the concept of profit

sharing which integrates the assets and liabilities sides of the bank's balance sheet based on the principle called the Two-Tier Mudarabah (Errico and Farrahbaksh, 1998).

On the liabilities side, in this particular model, depositors enter into a contract with a bank to share the overall profits accruing to the bank's business. Thus, depositors act as financiers by providing funds and the bank acts as an entrepreneur by accepting them. The bank, on its asset side, enters into another contract with an agent-entrepreneur who is seeking investable funds and who agrees to share his profit with the bank in accordance with a predetermined percentage stipulated in the contract. The bank's earnings from all its activities are pooled and are then shared with its depositors and shareholders according to the terms of their respective contracts. Thus, the profits earned by the depositors are a percentage of the total banking profits. According to this model, the banks are allowed to accept demand deposits that earn no profit and may be subjected to a service charge. This model, though requiring that current deposits must be paid on the demand of the depositors, has no specific reserve requirement on the total liabilities of the bank, other than that it must be positive. It further stipulates that the bank is obligated to grant very short-term interest-free loans (Qard Hassan) to the extent of a part of the total current deposits (Khan and Mirakhor, 1994; Siddiqi, 1982).

The second related model divides the liability side of the bank balance sheet into two windows: one for demand deposits (transactions balances) and the other for investment deposits (Khan, 1986). The choice of the window would be left to the depositors. This model requires banks to maintain 100 percent reserves against demand deposits, but stipulates no reserve requirement for the second window. This is based on the presumption that the money deposited as demand deposits are placed as Amana (safe keeping) and must be backed by 100 percent reserves because these balances belonging to the depositors do not carry with them the innate right for the bank to use them as the basis for money creation through the fractional reserves process. Money deposited in investment accounts, on the other hand, is placed with the depositor's full knowledge that his deposits will be invested in risk-bearing projects, and therefore no guarantee of value or return is justified. In this model, too, the depositors may be charged a service fee for the provision of the safekeeping services performed by the bank. Provisions of interest-free loans to those who may need them, according to this model, will have to be



limited to the funds deposited in such accounts by the depositors who may consider that the banks may be better equipped for this purpose. No portion of the deposits in investment accounts will be required to be used for this purpose (Khan and Mirakhor, 1994).

## **2.4 Egypt: the context of the study**

### **2.4.1 Background on Egypt**

Egypt is the most populous country in the Middle East. The vast majority of its estimated 89 million people in 2015 live near the banks of the Nile River. Around half of Egypt's resident live in urban areas, with the majority spread across the densely populated centers of greater Cairo, Alexandria and other major cities in the Nile delta and near the Suez Canal. Islam is the major religious and cultural force in Egypt; approximately 90% of the population is Muslims, mostly Sunni. The remaining 10% (Copts 9%, other Christians 1%) represents an important Christian minority, primarily the Coptic Orthodox denomination (CIA, 2015).

### **2.4.2 Egypt's Profile**

#### **2.4.2.1 The Administrative Profile**

The constitution of the country adopted in 1971 and amended in 1980, established a democratic system and outlined the role of public authorities. The executive power is vested in the President of the country who is elected by popular referendum for a term of four years. He formulates and supervises the implementation of general state policy. The People's Assembly is the legislative branch of the state composed of 444 directly-elected members and 10 members appointed by the President who all serve for a period of 5 years. The Shurah Council is a consultative body that proposes new laws and regulations to the People's Assembly. Administratively, Egypt is divided into 27 governorates and 246 districts. The governorates are headed by a governor who is appointed by the President. In districts, government units work closely with locally-elected bodies in managing public utilities and providing service (CIA, 2015). The constitution in Egypt passed through several phases, the latest approved by a

constitutional committee on December 2013, approved by a referendum held in January 2014 and ratified by interim president on 19 January 2014 (CIA, 2015).

#### **2.4.2.2 Politics**

Change is the common word on the Egyptian political scene when President Hosni Mubarak announced on February 28, 2005 that the constitution would be amended to allow for multiple candidates for the presidency. Opposition parties, nevertheless, remain skeptical of Mubarak's dedication to effect electoral reform, while popular opinion is still divided as to the scope of the proposed changes and how quickly any reform should be executed (Emerging Egypt, 2007).

The country is preparing for a form of political transition debate and with a number of options being considered and developed for the post-Mubarak period (EFT, 2007). In recent years, press freedom and general freedom of speech have expanded in Egypt, though legal restrictions, such as press laws which can lead to jail terms for journalists of defamation, continue to foster a high degree of self-censorship in the media (Sharp, 2006).

On the political front, defined in terms of prevalence of transparency; accountability; participation; free and fair elections; rule of law and respect of human rights, Egypt has lagged behind in terms of pace, scope and quality. This limited political development not only resulted in a less than optimal distribution of social and economic benefits, but has also compromised the welfare of Egyptians in enjoying their equal human rights (CIA, 2006).

As a response to the abovementioned facts, in 2011, An Egyptian revolution happened and removed the Egyptian president Hosni Mubarak. Although real socio-economic injustices may have been the justification for the Egyptian revolution it wasn't the cause of Egypt's politicization. Demonstrators peacefully protested because of high unemployment, lack of opportunity, lack of free elections, food inflation, corruption and lack of democracy (Badran, 2014).

Since 2011 revolution, the political conditions in Egypt were very much unstable. In May 2012, the presidential elections started and ended by the winning of Mohamed

Morsi, the Muslim Brotherhood's candidate on June 30. During his one year of presidency, people were very much unsatisfied by the ruling of the Muslim Brotherhood's candidate. Morsi granted himself more power and issued a decree allowing him to take all actions that he deems necessary to protect the country. This move sparked days of protesting. Moreover, the constitution draft finished in November sidelined the women, Christians, and intellectuals. In April 2014, a group of young activists stated a petition calling for Morsi to step down. By mid-June, this petition gathered 22 million signatures. Finally, on June 30, millions of Egyptians poured into the streets calling for Morsi to step down on the first anniversary of his election to office. After Morsi refusal to step down from the presidency, the armed forces and the general Sisi removed Morsi and the Supreme Court Chief Justice Adly Mansour was chosen to step in as Egypt's interim president. In January 2014, voters approved a new constitution by referendum and presidential elections in June 2014 took place and the voting for General Abdel Fattah ElSisi to be the president of Egypt scored around 97% (Childress, 2013).

#### **2.4.2.3 The Economic Environment in Egypt**

Egypt is a lower to middle-income country. The economy depends mainly on agriculture, tourism, media, and petroleum exports. There are also more than three million Egyptians working abroad, mainly in Saudi Arabia, the Persian Gulf and Europe. Egypt has been receiving U.S. foreign aid (since 1979, an average of \$ 2.2 billion per year) and is the third-largest recipient of such funds from the United States following the Iraq war. Its main revenues, however, come from tourism as well as traffic that go through the Suez Canal (CIA, 2015).

Egypt has been an economy in transition since the early nineties, after undergoing an economic reform and structural adjustment program that made the move from a centrally planned towards a market economy. Despite the progress achieved in the first ten years, towards the end of the 90s, economic growth was adversely affected by internal problems (slow pace of economic reform) and external factors (slowdown in the international economy and increased global competition). Rates of economic growth fell sharply in the first years after 2000, as did the Egyptian share of world exports. The public sector, which had traditionally absorbed large numbers of job entrants had to

undergo downsizing and privatization, while the private sector was not yet powerful enough to create new jobs to absorb the labor market entrants. In this way, unemployment became a major preoccupation. However, since 2004, an economic revival started, with economic growth averaging 5% as opposed to 3.3% from 2001 to 2003 (EFT, 2010).

According to the United Nations and government ministries, the rich-poor division in Egypt remains significant, especially in rural areas. Also, improvements in the gap between the rich and the poor are marginal. Poverty remains rampant and in the new development classification, Egypt ranks 119<sup>th</sup> out of 173 countries (IRIN, 2007b). Poverty reduction remains Egypt's most compelling challenge (WHO, 2006). Population below poverty line is 20% as estimated in 2005 (CIA, 2015). The major socio-economic challenges facing Egypt include the size of the population despite a decrease in its growth rate (WHO, 2006).

The Middle East Economic News Report (2002) has revealed that Egypt has been in the throes of an economic crisis. The macroeconomic situation has deteriorated after the September, 11. In particular, Egypt was undergoing a severe liquidity crisis as a result of the loss of hard currency from the tourism sector which has expected losses ranging from \$2-3 billion and the airline and shipping industry which has been hit by 50% increase in insurance premiums due to the decline of passengers, primarily tourists. Other factors contributing to the crisis include: the decline of revenues from the Suez Canal; the decline of oil prices after September, 11 due to the deepening recession in the U.S., and the excess of Egypt's oil exports by approximately \$0.5 billion a year; the decline in foreign direct investment from \$1.6 billion in 1999-2000 to \$ 507 million in 2000-2001; and the decline of the remittances from Egyptians working abroad from \$ 3.8 billion in 2000 to \$ 3 billion in 2001.

The government has massive investments in communications and physical infrastructure (Emerging Egypt, 2007). Egypt has become one of the leaders in the technology sector across the Arab region, with advances in computer programming, ambitious plans to computerize schools, the establishment of public internet access centers and general promotion of technological development (Sobeih, 2005).

The stock market has boomed, and Gross Domestic Product (GDP) grew about 5% per year in 2005-2006. Despite these achievements, the government failed to raise living standards for the average Egyptian, and has had to continue providing subsidies for basic necessities. These subsidies have contributed to a growing budget deficit (CIA, 2007). According to World Energy Outlook (WEO), Egypt's natural gas output will outpace oil to become the dominant fuel. Natural gas will account for 48% of demand by 2030, in line with government policies which encourage switching to gas for power generation and the increased use of gas in petrochemicals, fertilizers and the cement industries. Egypt has revived its status as a petrol-state and is now the world's sixth-largest exporter of natural gas (Emerging Egypt, 2004; 2007).

However, after the revolution in 2011 and the political turbulences and instability that Egypt had passed through, the revolutionary regime gave considerably greater priority to economic development and the economy has been a central government concern since then (CIA, 2016).

Since 2011, Egypt has drawn down foreign exchange reserves and depended on foreign assistance to finance imports and energy products and prevent further devaluation in the Egyptian pound (CIA, 2016).

#### **2.4.2.4 The Central Bank and the Monetary Policy in Egypt**

Since the beginning of the 1980s through 2005, frequent changes have occurred in the conduct and management of the monetary policy in Egypt. The changes have been implemented as part of the attempts by the government and the Central Bank of Egypt (CBE) to stimulate the short-term development of the real economy. They involved modifications in the operational and intermediate targets of the CBE as well as in the choice of the monetary instruments that were selected to achieve the operating targets. Nevertheless, the principal objectives of monetary policy remained more or less unchanged throughout almost all of that period, focusing essentially on price stability and the stabilization of the exchange rate. Moreover, during that period the CBE's principal monetary objectives occasionally included other goals such as increasing the level of output, promoting exports, raising foreign competitiveness and establishing confidence in the national currency. The high inflation rates that came about in the

aftermath of the floatation of the Egyptian pound, at the end of January 2003, established price stability and maintaining low rates of inflation, along with banking system soundness, as the main monetary objective of the CBE (Moursi et al., 2006).

To manage the interest rates (including the overnight interbank rate) and implement its monetary policy, the CBE adopted a new operational framework early in June 2005, known as the corridor system, with a ceiling and a floor for the overnight interest rates on lending from and deposits at the CBE, respectively. Hence, the interest rates would not fall following either a rise of the overnight deposit and lending rates or the widening of the corridor through an increase of its upper bound (CBE, 2005).

During the last year, the CBE has expressed its intention to keep inflation low and stable and to move eventually towards anchoring monetary policy by inflation targeting once the fundamental machinery needed for its implementation is installed (CBE, 2005). Meanwhile, in the transition period, the CBE will meet its inflation objectives importantly via managing the short-term interest rates as well as controlling other factors that affect the inflation rate including shocks to credit and to money supply (CBE, 2005). The CBE is committed to achieving, over the medium term, low rates of inflation which it believes are essential for maintaining confidence and for sustaining high rates of investment and economic growth. The Government's commitment to fiscal discipline is important to achieve this objective (CBE, 2009).

Commercial banks as well as Islamic banks in Egypt are governed by the Banking and Credit Law of the Republic of Egypt. In Egypt, the central bank has used various techniques of credit control, including banks rates, reserve ratio requirement, moral suasion, direct orders from the central bank and other qualitative controls. Open market operations have only been used in a limited way. However, Islamic banks do not participate in them. In using the qualitative measures of credit control, the central bank suggest differential interest rates for different sectors in accordance with the developmental priorities laid out in the development plan of the country. This measure is also applicable to Islamic banks. It should be pointed out that the central bank does not grant any concession or exemption to Islamic banks in this respect because of their special nature. In fact, they have to observe the national priorities, even while being unable to make use of differential interest rate. Commercial banks in Egypt, including

the Islamic banks, are required to deposit 15% of their foreign currency deposits with and 14% of their deposits in national currency with the central bank. There has been no attempt by the central bank to control the markup rate in Murabahah transactions, or to control the profit sharing ratio going to Islamic banks in Musharakah or Mudarabah transactions. The Banking and Credit Law No 163 also stipulates that no more than 65% of the deposits of the bank should be loaned out and that no more than 25% of the paid up capital should be committed to a single client at any one time. From the previously mentioned rules applied to both the Islamic and the commercial banks, it is clear that the Islamic banks are subject to the same regulations as the conventional banks which will lead to a feeling of hostility from the central bank towards the Islamic banks. Their main argument would be based on the fact that they do not grant credit so they should not be subject to the same measures of credit control which are applied to interest based commercial banks (Ahmad, 2000).

#### **2.4.3 The Evolution of the Banking System in Egypt**

The banking sector plays a central role in Egypt's financial system, accounting for more than 60% of the system's assets. The Egyptian banking system is considered, in its present structure, a product of several transformations that took place during the last decades. This has been reflected in the move from a banking system that was dominated by foreign banks, towards a system that is predominantly Egyptian, and dominated by state-owned banks, and highly concentrated. The series of Egyptianization and nationalization measures in the 1950s and 1960s, has led to a banking system that was considered a 'quasi-fiscal' agent that was directed to finance government priority projects, and SOEs (Mohieldin and Naser 2006).

Commercial banks were the first financial institutions to appear in the process of economic development in Egypt. Their establishments in the second half of the 19th century were closely associated with the needs of the extensive cultivation of cotton. During this period, there was a chronic shortage of capital that was hindering further growth in the Egyptian economy and its trade. Agricultural borrowers were relying on village money lenders. Foreign trade was receiving insufficient funding from a few finance houses similar in their operation to the old merchant bankers of the City of London. There was a manifest need for an organized formal financial system.

Developing such a system was hindered for several reasons. Among them was the inability of banks to introduce financial services that do not break the Islamic ban on usury; high financial instability during this period; the modest per capita income, and hence lack of savings; and the limited experience in credit dealings. However an attempt was undertaken to establish a government-owned commercial bank in 1830 with a capital of £300,000. This attempt failed, simply because the government could not raise the capital required (Mohieldin, 2000).

The lack of finance in Egypt received the attention of foreign financiers who found in the country an attractive market for their investment. In 1862, Egypt had its first foreign loan in its modern history. Successive governments continued borrowing in order to finance the repayment of old debts and fund new projects. Foreign debt accumulated, and the country suffered from a huge debt burden which reached unmanageable levels. To solve this crisis, the *Caisse de la Dette Publique*, was created in 1876 as an exchequer office for the government and was entirely controlled by a commission of foreign creditors. Its objectives were mainly to collect public revenue, service the public debt and engage, at the same time, in commercial transactions. Thus modern foreign-owned commercial banks were founded to fund the cultivation of crops, mainly cotton, and finance foreign trade. Some of these banks were branches of European banks and a few of them were registered in Egypt. The first of these banks was the Bank of Egypt which was established in 1856 with a head office in London, a main office in Alexandria and a branch in Cairo (NBE, 1948).

Hence, the National Bank of Egypt (NBE) was established in 1898 as a commercial bank with a capital of one million sterling pounds, with the head office of the bank was in Cairo. The bank was owned and managed by British citizens and maintained close ties with England through what was known as the London Committee. The NBE was granted, exclusively, the privilege of issuing banknotes, which were introduced for the first time in the Egyptian monetary system. The NBE acted also as the bank of the government, a private note-issuing bank, and financial adviser to the government. During this period, there were excessive speculation in land which ended with an inevitable crash and the Bank of Egypt was forced into liquidation in 1911 (Mohieldin, 2000).



The conditions of the First World War and the onset of the Egyptian revolution in 1919 inspired a campaign to establish a pure Egyptian bank as a necessary element of economic independence. Banque Misr was founded in 1920 with an initial capital of eighty thousand Egyptian pounds raised to one million Egyptian pounds under a precise condition that only Egyptians could be shareholders and members of the board of directors. The capital of the bank was subscribed mainly by large landowners and big merchants who benefited from the economic boom which followed the World War I. In a period of ten years, the volume of deposits increased from 200 thousand Egyptian pounds to 54 million Egyptian pounds in 1947 reflecting the confidence of the public and the progressing function of the bank which became second only to the NBE. It is worth noticing that the bank received support from the government which took the form of annexing Post Office Savings accounts to it in 1927 (Mohieldin, 2000).

It was mentioned in Mabro (1974), that the Egyptian government established an industrial bank in 1947 with 51% ownership and the rest were owned by operating banks and the public. This bank was initially established to enlarge the industrial base. Afterwards, the 1952 revolution took place; the new government was trying to assure foreign investment about the stability of the economy. That is why; the banking system did not observe any unusual changes regarding its structure, activities or the ownership of its institutions (Mohieldin, 2000).

From 1956 to 1974, the measures of Egyptianisation, established by Law 22/1957, were far more substantial than anything that went before. The law specified that all operating British and French banks should be sequestered. The rest of the operating banks had to take the form of joint stock companies, within five years. The paid-up capital of operating banks should not be less than LE.500 thousand, in the form of shares owned by Egyptians. Small banks, which could not fulfill the capital requirements under the new law, either joined one of the Egyptian banks or closed down. Eventually, as a result of these measures the number of banks decreased from 35 in 1957 to 27 in 1958 (NBE, 1974).

After liquidating some of the small banks and merging others, by the end of 1963 the banking system consisted of only five public commercial banks, namely: the NBE, Banque Misr, Banque du Caire, Bank of Alexandria and Port Said Bank; in addition to

five specialized banks: an agricultural bank, an industrial bank and three real estate banks. By 1974 there was just four commercial banks and three specialized banks, in addition to 3 unregistered banks, which were the only banks established during this period. (NBE, 1974).

The 1970s witnessed the ‘open door’ policy, *Infitah*—the beginning of a new era of liberalization, where the banking sector activities were open to private capital, both foreign and local, resulting in an increase in the number of banks without a significant decrease in market concentration (Mohieldin and Naser 2006).

The Infitah policy which was accompanied with a windfall of external resources stemming from oil exports, workers' remittances, tourism, the Suez Canal revenues and foreign assistance; had a radical impact on the banking system and structure. Under the Investment law 43 for 1974 and its amendments by law 32 for 1977, banks were no longer subject to the exclusive Egyptian management rules of the 1960s. Foreign capital was allowed to participate in joint-venture commercial banks, under the no-less-than 51% national ownership condition (Mohieldin, 2000).

The Infitah laws encouraged the establishment of foreign and joint venture banks. Hence the number of operating banks increased rapidly from 7 banks in 1974 to 81 banks in 1991. The increase in the number of banks also resulted in a rise of the number of branches which reached a total number of 1882 branches in 1991. However, during this period the structure of the banking system and the geographic concentration of branches indicated a highly segmented market and lack of competition. The relatively large branch networks of a few public sector banks allowed them to dominate the process of savings mobilization and other banks targeted mainly big savers (CBE, 1991).

Public banks in Egypt like in other LDCs were more prone to government intervention in credit and planning decisions than private banks. Incentives to maximize profits, or even to minimize losses, barely existed. The conditions of public banks then would be described to have low resource mobilization; low profitability; low capitalization ratios and insolvency; complicated bureaucratic procedures for loan processing and operating inefficiency; allocation of resources on the basis of non-economic criteria; reduced

autonomy and poor quality of personnel, overstaffing and weak management (Sheng, 1990).

#### **2.4.4 The Reform of the Banking System in Egypt and Its Implications**

Egypt started a comprehensive Economic Reform and Structural Adjustment Programme (ERSAP) in 1991. This reform Programme was supported by a stand-by arrangement from the IMF and a structural adjustment support from the World Bank, in addition to the bilateral debt forgiveness/debt service relief of the Paris Club. The primary objective of ERSAP is summarized by the IMF (1991) as "to create, over the medium term, a decentralized market based, outward-oriented economy where private sector activity will be encouraged by a free, competitive, and stable environment with autonomy from government intervention. For this purpose, controls on economic activity and investment are to be dismantled and primary reliance placed on market forces for resource allocation (IMF, 1991).

The reform of the banking sector during the 1990s took three main forms. First, the liberalization of the financial variables. Second, as part of the banking reform program, one of the main priorities of the authorities was improving the regulatory framework. New prudential measures were introduced in 1991 for capital adequacy and asset classification and provisioning after setting bank liquidity requirements for domestic and foreign currencies in 1990. Third, the banking sector was included in the privatization program which took the form of the privatization of the public sector shares in joint venture banks, and the public banks (Deabes, 2006; Wijnbergen, 1993).

The most visible aspect of the reforms is the government's firm commitment to selling state-owned bank assets and leaving the business to the private sector. Starting in 2005, the ministry of investment began pushing the big four public sector banks- which themselves held minority stakes in nearly 20 other banks- to begin selling those stakes back to respective joint venture partners or new foreign banks. The privatization drive culminated in the sale of 80% of the bank of Alexandria, the smallest of the big four banks, to San Paolo IMI of Italy in October 2006 (The AmCham report, 2008).

The government's plan for banking reform followed recommendations of the joint 2002 IMF-World Bank Financial Sector Assessment Program for Egypt. The plan called for consolidation, sale of government shares in JV banks and restructuring of public banks, to include resolution of the non-performing loans (NPL) problem, in preparation for privatization (Economic trends report Egypt, 2007).

The Egyptian people's Assembly (Parliament) also passed the unified banking law in 2003, which most notably increased banks' minimum paid-in-capital requirement from L.E.100 million (\$17.8 m) to L.E.500 million (\$89 m) and set risk weighted average capital adequacy at 10% (NBE, 2005).

In September 2004, the Egyptian government, propelled by the banking developments on the international arena, the structure of the banking system and the increasing competition, introduced its plan for reforming and restructuring the banking system financially, and managerially with a view to enhancing its competitiveness locally and internationally. The aforesaid plan, expected to be finalized within 5 years, is based on six pivots, as follows (NBE, 2005):

*First pivot:* Merging small banks in larger entities.

*Second pivot:* Addressing NPLs through a CBE's arbitration committee and a follow up unit for NPLs.

*Third pivot:* Restructuring the public sector banks financially and managerially, with the possibility of privatizing one of them in the future.

*Fourth pivot:* Expanding the ownership base in joint banks via selling the public banks' equity participation therein and allocating the sale proceeds to their financial restructuring.

*Fifth pivot:* Strengthening banks' supervision to be in line with international standards, safeguarding the banking system and unifying banking and non-banking financial systems in one system.

*Sixth pivot:* Enhancing the role of the CBE in managing and monitoring the reform process.

In July 2005, the deadline for banks to meet a new capital requirement of L.E.500 million stipulated in the Unified Banking Law of 2003 expired, following a grace period of one year. Since August 2004, the Central Bank decree regulating capital increase requirements, and requiring capital adequacy ratio of at least 10%, several mergers and acquisitions occurred, affecting approximately 20% of licensed banks (Economic trends report Egypt, 2007).

Prior to the reform strategy, the Egyptian banking system included 63 banks; 28 commercial banks (including 4 public sector commercial banks), 11 investment and business banks, as well as 3 specialized banks (wholly owned by the government). This is in addition to 19 branches of foreign banks (6 of which are non operative) and 2 banks are not listed with the CBE; namely the International Arab Bank and Nasser Social Bank (NBE, 2005).

In the context of consolidation of the banking system by reducing the number of banks, the government has also announced in August 2005, the merger of the second and third largest state owned commercial banks (Banque du Caire and Bank Misr), and the mergers of the two housing and real estate banks, the Egyptian Arab Land Bank, and Housing and Development Bank to create one large real estate finance bank (NBE, 2005).

Various other mergers and consolidations of small banks have taken place in 2005, in addition to the divestiture of public sector shares in 15 joint venture banks. However, all these mergers have not been reflected in the ownership and governance structure, as the legal and technical mergers of these banks has not been finalized yet (Mohieldin and Naser 2006).

Misr Exterior Bank was the first bank to be merged; it was absorbed by Banque Misr in September 2004 (NBE, 2005). By 2006, 11 small banks had been merged into larger banks and the CBE had begun legal procedures to liquidate branches of three foreign banks that had not met the capital requirement. In June 2006 the Islamic International Investment Bank, United Bank of Egypt and Nile Bank restructured as a private bank under the name of United Bank (UB), with a paid-in capital of L.E.1 billion. The three merged banks could not meet their L.E.500 million capital requirement and had 920

cases of distressed assets worth L.E.5.6 billion. In addition to a capital boost, the CBE granted UB an additional subordinated loan amounting to L.E.3 billion to support the acquisition. This was the first time that the CBE established a new banking entity structured as a private bank. The CBE owns 99.9 % of the entity, but its ownership will terminate once the bank's loan portfolio is strengthened and the initiating funds from CBE are reimbursed (Economic trends report Egypt, 2007).

Along with consolidation, the government's reform plan called for divestiture of government shares in JV banks, the proceeds of which were to be allocated for financial restructuring of state-owned banks. To date, ten banks have been divested of public shares, including MIBank; NSGB; Misr-America International Bank; Egyptian-Commercial Bank; Misr-Romania Bank; Suez Canal Bank; Delta International Bank and the Cairo Far East Bank. In 2006, approximately 75% of a large JV bank, the Egyptian-American Bank (EAB), was sold to Calyon Corporate and Investment Bank, part of the French Credit Agricole Group. Trading in both Calyon Bank Egypt and EAB was suspended in August 2006 upon completion of merger procedures, and EAB was de-listed from the stock exchange on August 31. Credit Agricole Egypt, the new bank formed from the merger, started trading its shares in September. In February 2006, the government's share of the largest JV bank – CIB – was sold to a U.S. consortium. These divestitures have somewhat changed the position of these banks in the market. CIB moved from first to second place, in terms of market share of loans and deposits; NSGB is now in first. Credit Agricole is now Egypt's third largest private bank. Arab African International bank acquired Misr America International Bank and the Egyptian American Bank acquired American Express Bank's branches. Moreover, Credit Agricole Indosuez (Egypt) and Credit Lyonnais Bank's branches in Egypt were merged to form Calyon Bank- Egypt (CBE, 2007).

Government transparency regarding the status of NPLs in Egypt has improved. Resolution of the NPL problem began in 2004, when the government established an Arbitration Committee and an NPL unit at the CBE to resolve bad debts, handle disputes between banks and borrowers and develop a long-term solution to the NPL problem. The CBE also asked banks to establish their own units to maintain information on NPLs, and monitoring progress on recovery, settlement and write-offs. Although the

majority of banks still do not disclose their level of distressed assets, various estimates indicate that NPLs as a percent of total loans is declining and stands on average at 20-25% at present (Economic trends report Egypt, 2007).

The financial crisis that hit the international markets in late 2008 did not significantly harm the Egyptian banking sector as it had “abundant liquidity due to the accelerated projects by various investors in booming business sectors over the last three years” (International Finance Corporation, 2009). It was not active in the provision of mortgage banking, nor factoring operations nor financial leasing (Reda, 2008).

By the end of 2010, the Egyptian banking industry was composed of 39 banks. This number included 37 commercial banks of which three banks were public, yet accounted for a large share of banking activities. Moreover, there were 27 private banks and seven off-shore banks. Out the 39 banks, there existed two specialized public banks provided mid and long term financing to the agriculture and real estate sectors (CBE, 2010).

## **2.5 Background on Islamic banking in Egypt**

The process of applying Islamic financial principles took two forms in Egypt. Firstly: establishment of Islamic banks, both private and public and setting up of Islamic branches of conventional banks. Secondly: the formation of Islamic investment companies which belong to the informal sector.

### **2.5.1 Public Banks**

#### **2.5.1.1 Meet Ghamr Bank**

The first experiment in Islamic banking, in the Muslim world, was undertaken in Egypt in 1963, by the establishment of local savings bank in the semi-rural town of Meet Ghamr, in the Dakahliya province, in the Delta by Ahmad Al-Najjar. The bank was an adapted model of the German savings banks to comply with Islamic principles, which Al-Najjar became familiar with during his studies in Germany. The bank established 7 branches located in the rural areas of the Nile Delta. For fear of being labeled as a manifestation of Islamic fundamentalism, Al-Najjar never mentioned the bank as an Islamic one during the process of founding it for fear that his project would be rejected

in an anti-Islamic era. Neither the state nor the public was informed that the motive behind the creation was an Islamic one (Henry and Wislon, 2004).

It was established by a German grant of DM 780,000 and an Egyptian government contribution of L.E. 60,000 transferred from the Post Office Savings Fund (Al-Najar, 1993). The bank operated until 1973 and during the five years of its operation, the government continued to subsidize the activities of the bank. The subsidies totaled L.E. 496,000. Like the rest of the operating financial intermediaries in Egypt during this period the Meet Ghamr Bank (MGB) had to be publicly owned. The bank was not subject to direct supervision from the central bank but an especially constituted public authority assumed the supervisory role (Mayer, 1985).

The MGB provided three different accounts. The first type, deposits accounts with a very small minimum and without a maximum. There was no return whatsoever for the holders of such account which can be considered an equivalent of current account in the conventional system. The second type was called investment with participation accounts which accepted deposits with a modest minimum and had no maximum. These accounts provided a Profit/Loss Sharing return to depositors. The third type was the Zakah and social services account. This account accepted alms taxes from individual in addition to charities and donations (Al-Najar, 1993). During the first two years, the number of accounts reached 150,000 and the size of deposits amounted L.E.370,000. This growth has to be considered high for a rural area, which 90% of the population are peasants with low income. The major proportion of depositors had previously never been in contact with financial institutions (Kazarian, 1993).

As shown in table (2.2) the number of depositors increased from 17,560 in the first year of its operation to 251,152 by 1966/67, by an impressive average annual growth rate of 538.3%. Depositors were mainly from the small savers group as the average deposit ranged from L.E.2.33 in 1963/64 to L.E. 7.28 in 1966/67 (Al-Ashker, 1990).



**Table (2.2): Comparison between the Islamic and Conventional Banking**

Year	Number of depositors	Amount L.E.	Deposit Average Size
1963/64	17,560	40,944	2.33
1964/65	30,404	191,235	6.30
1965/66	151,998	879,570	5.79
1966/67	251,152	1,828,375	7.28

Source: Al-Ashker, 1990

Loans were provided by the bank according to profit and loss sharing principle to small entrepreneurs for periods ranging from one to five years (Al-Ashker, 1990). The bank in its second year of operation began to establish small projects of its own. In general, projects financed by the bank were established in the same local area. The idea was to assure depositors that their money was invested in projects which would contribute to the development of their communities. In addition the bank provided interest-free small consumption loans, averaged L.E. 50 per borrower. Although these loans were provided without collateral, the number of defaulting borrowers was small (Mayer, 1985).

The favorable experience of the bank convinced several governorates to apply for the establishment of similar banks. The number of application exceeded seventy but the management of the bank was not able, due to shortages of trained staff, to open more than seven branches located in the Delta and in Cairo (Al-Najjar, 1995).

Despite the success of the MGB, the government found it necessary to put the bank under immediate control. The call for such control was a response to two main concerns. First; it was realized that the bank was operating under rules which contradicted those applied by the rest of financial intermediaries. The government was suspicious that such a contradiction might bring a dispute amongst the public regarding what should be considered as Islamic and what should not, which may affect the

operations of the dominant conventional banks. Second; the government found in the bank a threat to its socialist ideology and its management of the economy which was based on central planning. It has been argued that the government didn't wish to contribute to the Islamization of the economy at that time. In the socialist period, a bank being a mixture of capitalist model and an Islamic character was naturally a target for government intervention. As a result the MGB lost its operational autonomy and eventually was closed down in 1968. Its operations, which became interest-based, were assumed by the National Bank of Egypt and the central bank (Al-Najjar, 1993). The Meet Ghamr bank, despite the difficulties it faced, provided an applicable model for other Islamic banks which were established subsequently.

#### **2.5.1.2 The Nasser Social Bank**

One of the Islamic banks that benefited from the experience of the MGB is the Nasser Social Bank (NSB). This bank was formed in 1971 and began its operations in 1972. The bank has been established as a public institution for social welfare and its capital, which reached L.E. 20 million in 1990, was provided by the government. However, the NSB is not registered with Central bank and hence it was exempted from its supervision and regulation. The NSB has a wider function, through its 23 branches, than the MGB as it operates at the national level but has applied almost the same rules as its predecessor. It was set up as a public social welfare institution, operating with interest-free loans to under-privileged groups, providing pension and welfare benefits, and the financing of pilgrimage to Mecca. The bank is also engaged in investment activities with religious and social benefits such as educational religious institutions, medical assistance, and building mosques. The annual collection of Zakah, donations and inheritances left without any beneficiaries constitutes the main source of revenue and funding for the bank in addition to an annual subsidy from the government (Kazarian, 1991).

In its early years, the NSB was free to provide credit without the need to comply with the credit ceilings imposed by the government. Loans provided by the NSB took two forms; productive loans and social loans. It is worth noting that the NSB does not share the profits or losses of its borrowers. It requires them to return the principal in addition to 1% charge. This charge is considered as "cooperative insurance". The NSB subsidize

its loans from the Zakah fund and, to some extent, from the profits it makes from its direct investment (Mayer, 1985).

Nevertheless, the NSB has recurrently breached its regulations. It is reported that the bank undertook several interest-based transactions with other financial intermediaries. Moreover, it deposits some funds with conventional banks in return for interest (Al-Najjar, 1993).

### **2.5.2 Private Banks**

There were three private Islamic banks in Egypt. The first is the Faisal Islamic bank of Egypt (FIBE) which started its operations in 1979. FIBE's authorized capital was US\$ 500 million, and the paid up capital was US\$70 million in 1991. The special act number 48 of 1977 gave the bank independence from all governmental authorities but put it, however, under the supervisory role of the Central Bank. In 1993, the bank had 14 operating branches in the major cities. The authorized capital is \$100 million in 1993, with an Egyptian participation of 51% and a Saudi participation of 49%. The second bank is the Islamic International Bank for Investment and Development (IIBID) which was established in 1980 in accordance with the investment law 43 of 1974 and started its operations in 1981. In 1990, the bank had 7 branches located in the biggest cities and 4 branches were under construction. The authorized capital of the IIBID is \$100 million and the paid up capital is \$60 million in 1992 (Galloux, 1999).

However, the start of the comprehensive Economic Reform and Structural Adjustment Program (ERSAP) in Egypt in 1991 resulted in many consolidations in the industry that cut the total number of commercial and investment banks to 36 by the end of 2006 (from 45 at the end of 2005). The Egyptian people's Assembly (Parliament) passed the unified banking law in 2003, which most notably increased banks' minimum paid-in-capital requirement from LE.100 million to L.E.500 million and set risk weighted average capital adequacy at 10%. By 2006, 11 small banks had been merged into larger banks and the CBE had begun legal procedures to liquidate branches of three foreign banks that had not met the capital requirement. In June 2006, the Islamic International Investment Bank, United Bank of Egypt and Nile Bank restructured as a private bank under the name of United Bank (UB), with a paid-in capital of £E 1 billion. The three

merged banks could not meet their £E 500 million capital requirement and had 920 cases of distressed assets worth £E 5.6 billion (The AmCham report, 2008).

The third and the newest bank is the Egyptian Saudi Bank (ESFB) which is an Egypt-based company engaged in providing Islamic-compliant banking solutions and services. The Bank operates through a network of 18 branches and offices in Cairo, Alexandria, Mansoura and other Egyptian cities. Its banking activities include retail banking; foreign trade services; letters of credit and foreign currency deposit; saving pools, and investment trustees, which provide such services as real estate management and marketing, subscription procedures for newly established companies, fund management and projects finance and monitoring. ESFB is part of The Baraka Banking Group, Saudi Arabia, and its subsidiary is Egyptian Saudi Finance For Real Estate Investment Co., which 40% is owned by the Company (The AmCham report, 2008).

Nowadays in Egypt, there are two purely Islamic banks delivering Islamic banking services. Some traditional commercial banks provide Islamic banking products through specialized windows. There are 9 banks equipped with 69 Islamic branches and units. Also, a UAE consortium led by Abu Dhabi Islamic bank acquired 51.3% of the National Bank for Development (NBE economic bulletin, 2007). The National Bank for Development (NBD) has built up a 78-branch network but was nearing bankruptcy. NBD didn't meet the minimum paid-in-capital requirement and the NPLs make up more than 50% of the loan portfolio. But as the foreign entrant, ADIB faced a problem that NBD didn't have an Islamic banking license. ADIB has signed a memorandum with the central bank of Egypt (CBE) promising to immediately increase the capital of the new acquisition to the minimum LE500m, and up to LE5.2bn in 2008 in order to cover LE2bn in NPLs over the course of five years and not to grant cash dividends until then. The bank independently plans to add 30 new branches in the coming year, which will put them far beyond the capacity of the current Islamic banking leader Faisal Islamic Bank (The AmCham report, 2008).

The assets managed by Islamic banks amounted to EGP 19.7bn as of December 2006, excluding the assets run by conventional banks' Islamic windows (there are no data available concerning the volume of transactions carried out by conventional banks' Islamic windows as such banks are not willing to disclose the relevant information).

This amount represents 2.3% of the banking system's total assets. Islamic banks could mobilize deposits of EGP 24bn accounting for 4.1% of the banking system's total deposits. They executed Murabahah and investment transactions with the sum of EGP 17.4bn. Branches of Islamic banks and Islamic branches of traditional banks totaled 108 branches as of June 2007 i.e., 5.3% of the total bank branches in Egypt (NBE economic bulletin, 2007).

Concerning the Central bank supervision over Islamic banks, there is no yet a special law regulating the operations of Islamic banks. Islamic banks in Egypt are governed by the provisions of Law No. 88/2003 on the CBE. This law did not contain separate provisions regulating the operation of Islamic banks. These banks, therefore, work in accordance with the same rules and regulations governing conventional banks. This encompasses reserve and liquidity ratios, as well as capital adequacy and requirements (Dawabah, 2006).

### **2.5.3 Islamic Branches**

After the success of Islamic banks in attracting depositors, many traditional banks established branches, called Islamic branches or units, which operate according to the Islamic financial principles. The first branch was set up by a public commercial bank, Banque Misr, in 1980 (Kazarian, 1993). Apparently the bank was concerned that the newly established FIBE would attract away some of its potential business as well as existing depositors (Mohieldin, 1997). At the end of 1990, 62 branches of 23 conventional banks had been set up. Just 12 of these branches were of private while 26 of them belong to public banks and 24 to joint venture banks, i.e., owned partly by public banks. The assets of these branches reached about L.E. 2.2billion, and the size of the deposits attained a value of L.E.1.82 billion in 1990. The size of these branches were small compared with the assets and deposits of the three major operating Islamic banks, including Nasser Bank, which reached L.E.6.1 billion and 5.1billion respectively (Annual reports, CBE).

Most of Islamic branches' depositors were individuals who used to have deposit accounts with the same bank. They simply transferred their accounts to the Islamic branch of their bank for three reasons: firstly; it offered the same return as the main

bank and in some cases even more. Secondly; it had an Islamic image which fulfilled, according to the perception of these depositors, the religious aspect of the dealing. Thirdly; these branches were fully supported by their well established main branches, some of them, like Banque Misr, had had a good banking profile for more than seventy years, in contrast with the newly established Islamic banks or Islamic Investment Companies (Mohieldin, 1997).

By 2007, there have been more than 70 Islamic branches operating in Egypt ((Mouawad, 2009). Moreover, Islamic branches did not share the features of Islamic banks, although they have a religious charter as Islamic branch, in two important aspects: firstly; they did not have a board of religious scholars to verify the banks' operations and assure their compliance with Islamic law in all transactions and secondly; they did not have a Zakah account which emphasized the Islamic character of the bank (Mohieldin, 1997).

In fact, Mohieldin (1997) argued that the establishment of Islamic branches of conventional banks is a form of product diversification. They were established to benefit from the Islamic resurgence and avoid loss of customers to the growing Islamic financial institutions. The establishment of a limited number of Islamic branches of big conventional banks which had a large network of branches and outlets, like Banque Misr, was not a part of gradual Islamization of the banks concerned, but rather it was meant from the beginning to keep the number of Islamic branches as small and symbolic as possible. In practice, the Islamic branch was no more than a branch without any significance difference from any conventional branches other than in name.

#### **2.5.4 Islamic Investment Companies**

In addition to the Islamic banks and Islamic branches, established by the traditional banks, a large number of financial institutions based on Islamic principles were set up in the first half of 1980s. These institutions, called Islamic Investment Companies (IIC), were considered as informal institutions, because their activities are not subject to or controlled by any official authority. The beginning of these companies coincided with a surge in foreign currency transfers from workers in the Gulf area. The declared aim of IICs is to collect funds from the public and to invest them in the

Egyptian market according to the Islamic financial principles. The return to depositors is paid in form of dividends rather than interest. They grew in a spectacular manner to reach a number that almost attained 105 companies and the end of 1988. The exact number regarding these institutions was never agreed upon; in fact, five or six companies grew very largely. However, the latest official number of depositors was 650,000 and the size of deposits reached L.E.4.6 billion which corresponds to about 30% of the total deposits in the banking system. This figure was four times greater than the number of depositors of the Islamic banks. The major part of the deposits, about 85%, was held by the six largest institutions (Mitchell, 1999; Kazarian, 1993).

The success of the IIC in attracting savers is attributed to several factors. One of the factors is the high rate of return offered by those institutions in comparison to the interest rate of the traditional banks. They offered 24% as a rate of return while the traditional banks offered only 12% which in fact created a hedge against real inflation rates by 4 %. Also, these institutions had a wide range of low operating cost branches, reaching areas neglected by the traditional banks and the bureaucratic procedures were totally facilitated and the process of opening an account and depositing funds was simple and short, which is very much convenient for uneducated savers with small deposits. They accepted deposits from as small as L.E.100 to L.E.2 million. They targeted small depositors in attracting savings as this group of people has never been put into consideration by the formal banking sector which normally had set a minimum to open a deposit account which was not possible for a large number of depositors (Mohieldin, 1997).

As Warde (2000) argued, the rise of those companies came with the context of the open door policies which liberated the Egyptian economy. These institutions generated their profits from speculation in the black markets for currencies and by monopolizing trade. Consequently, they had slowed down the financial system and imposed restrictions on the official market exchange. In fact, the founders of the largest 2 companies were at the top of the list of the 55 main foreign exchange black market traders.

As mentioned in Kazarian (1993), these institutions continued to pay the high rate of return by using the new deposits as a profit. Furthermore, the IICs were accused of

using Islam as a slogan and tool to attract small depositors who were sensitive to religious principles.

It is important to mention that, the speculative activities of those IICs were a consequence of price distortions created by the contradictory governmental economic policy. Although, the government was aware of these speculative activities, it ignored them totally and perceived them as promoters of foreign currency in the economy (Mouawad, 2009).

Despite the speculative activities of the IICs, certain factors can explain their relatively high rate of return. One of the most important reasons is that those companies were not subject to any public supervision and, as a result, unaffected by the regulations of the central bank. They restrained from directing their funds towards those activities which gave the highest rate of return such as wholesale and transactions in the exchange markets. Furthermore, they were not obliged to deposit a high percentage of their assets, 25% of total deposits, at the central bank without gaining any return. Finally, they were not subject to taxation (Mohieldin, 1997; Kazarian, 1993).

However, by 1988, the bankers finally convinced the government to terminate the activities of these companies. Moreover, the majority of IICs were encountering deficiencies in liquidity especially after the fall of oil prices that led to huge losses in depositors' funds (Warde, 2000). In addition to the external pressures from the International Monetary Fund, the government, eventually, responded by passing a special law no 146/1988, that suspended the operations of these companies for up to a year, consequently that obliged the IICs to restructure themselves as joint stock companies and a minimum capital standard was imposed. The companies found themselves forced to deposit all of their liquid assets in the government banks. Such drastic governmental policy change led to the tremendous collapse of the IICs, where very few of them were able to the new adjustments and the rest with deposits around L.E.3.6 billion were subjected to judicial process. Furthermore, though this measure protected the banks and their well-connected clients, but, it provoked a general financial depression from which neither the banks nor the national currency could recover (Mitchell, 1999; Kazarian, 1993).



Mohieldin (1997) argued that the government's movement was too late and did little to reform the IICs. In fact, this action contributed to their early collapse as they were heavily regulated and effectively denied access to fresh capital. After the big collapse, depositors in some companies received only 10% of their funds while other depositors did not receive even the 10% as their companies' assets were difficult to liquidate or were not adequate to cover any deposits. Consequently, the Egyptian country lost 15% of its GNP and 30% of people's deposits, causing an economic setback in the Egyptian economy (Business Today, 2007).

## **2.6 Conclusion**

This chapter presents an overview over the concepts of Islamic Shariah, Islamic economics, finance and Islamic banking. It introduces the basics for Islamic banking, the sources of fund, the pools for investment and the two basic Islamic banking models. It presents what is real and pure Islamic banking is. It also gives a summary about Egypt since it is the context of the study. It worthies to be mentioned that the starting point of Islamic banking was in Egypt in 1963, yet the growth of Islamic banking in Egypt is far behind many Arab and even Western countries which adopted the Islamic banking in order to satisfy a wide range of their Muslim or even Non-Muslim customers who prefer to use the Islamic banking system. Moreover, along with the introduction related to the history and evolution of Islamic banking in Egypt, this chapter also gives a detailed explanation for the types and numbers of Islamic banks functioning in Egypt. Due to the very nature of the Egyptian case, the researcher believes that the study of the Islamic banking performance in Egypt will fill an enormous gap in this research field especially that Egypt is a distinguished country when it comes to the banking industry and it has worldwide international financial and banking relationships, moreover, many foreign banks have large branches working in Egypt. Despite all these facts, still the Islamic banking industry is crawling in Egypt in comparison to many countries that newly adopted the Islamic banking system unlike Egypt. The following chapter will present an overview over the topic of performance measurement and the previous studies performed on performance measurement in financial institutions and Islamic banks in specific. Moreover, there will be a detailed discussion about the important

researches that measured the determinants of profitability in banks along with the studies performed on Islamic banking in Egypt.

## **Chapter Three**

### **Literature Review**

#### **3.1 Introduction**

In an increasingly dynamic and information-driven environment, the quest by business leaders and management researchers for performance measurement which reflects competitive strategies, quality improvements, and speed of service is at the forefront of managing organization performance (Tapanya, 2004).

Researchers have argued that looking for a direct link between contemporary performance measurement systems and organizations' superior performance might be misleading due to the internal and external factors that play a role in economic performance evaluation (Lee and Yang, 2010).

Franco-Santos et al. (2012) suggest that further contemporary performance measurement systems research should explore how this system interacts with organizational variables, which, once again supports the importance of using a contingency approach in this particular area of this research.

#### **3.2 The Historical Background of Performance Measurement Systems**

The evolution of literature on performance measurement systems can be divided into two main stages. The first stage started from the late of 1880s till the 1980s when the emphasis was mainly laid upon productivity measures. From the organization's owners' point of view, measuring the performance of their organization was very critical and important. They used the return on capital and the return on assets as well as other financial indicators to measure the performance. Many managers have tracked other indicators like quality, market share and many other non-financial measures; yet, they were not given equal importance as financial measures in deciding about strategies, promotions, bonuses and other rewards (Jermanis, 2006).

The second stage, which started in the late 80s, has put an emphasis more on a balanced and integrated system which encompasses both financial and non-financial performance measures. This new trend is considered more appropriate to suit the new internal and external operational conditions of organizations (Jermanis, 2006; Rejc, 2003). There is a growing amount of literature on the use of performance measurement systems, including both financial and non-financial performance measures (Bhimani and Langfield-Smith, 2007; Otley, 1999; Chenhall, 1997; Ittner et al., 1997).

It was argued that the development of accounting practices and its beginning in the 16<sup>th</sup> and the 17<sup>th</sup> centuries was limited to the spread of double entry bookkeeping then the closing of books for the commercial and trade businesses (Zan, 2004; Parker and Yamey, 1994).

Zan (2005) argued that there were very simple accounting innovations in managerial measures of control. He added that basically, these measures had begun to appear in relation to the stage where there was a need to account for parts, materials and components to measure the work-in-progress.

Fleishman and Tyson (1993), Johnson (1983) and Parker (1969) claimed that firms in the 18<sup>th</sup> century were simple and not sufficiently complex in order to justify the invention and adoption of sophisticated management accounting techniques. They assumed that most of the accounting innovations were not due to any managerial or financial professionals, but due to the inventions of businessmen who created those innovations to maintain the success of their businesses. However, Fleishman and Tyson (1993), Hudson (1977), Parker (1969), and Pollard (1965) asserted that business entrepreneurs in this time period were mostly committed to only one aspect of performance measures, which was profit. Mephram (1988a; 1988b) claimed that the European merchants in the 18<sup>th</sup> century who were mainly interested in accounting for profits developed a financial measure which is the rate of return. Afterwards, the use of this performance measure was spread everywhere and prevailed in the European agriculture and mining firms and it was considered as an effective performance tool.

Pollard (1965) added that by the end of the 18<sup>th</sup> century, many London trade enterprises were becoming large and integrated and dispersed internationally and this uncovered the

need for new management accounting practices. Carlos and Nicholas (1988) argued that these early trading companies were forced by the volume of transactions to replace owner- managers by teams of experienced and specialized managers organized in a well defined hierarchy.

In the late 18<sup>th</sup> century and beginning of 19<sup>th</sup> century, Johnson and Kaplan (1987) and Chandler (1966) stated that the lines and borders of requirements for administrative success in the business world were very well defined and this was due to the nature of enterprises which was relatively small and family in nature. Chandler (1966) mentioned that the management positions that include selling, purchasing, accounting and finance were limited to either the owners or agents hired by the owners to represent them. Chandler (1966; 1977) asserted that the origins of management control practices were laid down in the heyday of American railways management. He added that in the mid of the 19<sup>th</sup> century, American managers of the transportation and communication enterprises developed the performance measurement tools. They invented new managerial control tools that ensure the appropriate running of trains and functioning of communication lines. These large investments required managing multiple branches and resulted in delegation of some tasks and this consequently necessitated the need for the development of management accountability and control.

Around the end of the nineteenth century, with the beginning of F.W.Taylor, the interest in the assessment of performance has shown increasing growth up that continued to develop till the present. As cited in Cole (1996), Taylor developed new scientific methods depending on time and motion studies, as he developed systematic production and inventory controls to help him in determining overheads costs in order to relate such costs to fluctuations in volume. He believed that everyone should benefit from scientific management - workers as well as managers. He argued that, scientifically measuring jobs and setting rates accordingly will help in rewarding efficient workers for their productivity without limit. He developed a number of effective concepts related to cost accounting which affected performance measurement systems. His effort helped to a great extent in evaluating functional managers' performance and guided the organization's overall performance (Johnson and Kaplan, 1987; Chandler and Daems, 1979).

On the opposite, Spraakman and Margret (2005) claimed that the management accounting practices were transferred from London counting houses to the British North American fur trade during the late 18<sup>th</sup> and beginning of 19<sup>th</sup> centuries. They asserted that this transfer involved a set of practices for effective strategy implementation. They argued that the development of management accounting practices by London counting houses facilitated the backward integration with America and the West Indies.

Fleischman and Tyson (1993) and Johnson and Kaplan (1987) argued that during the industrial revolution there was a less need than today to use management accounting practices as a tool for decision making and that the need for those tools emerged as a rational business response to opportunities involving new technologies and markets. Fleischman and parker (1990) similarly asserted that the profit-motivated behavior of entrepreneurs was a significant driving force in the development of management accounting practices. Chandler and Daems (1979) claimed that the increase in the degree of complexity of organizations lead to more delegation of authority and separation between ownership and management and this consequently had a large impact on the development of new performance measurement systems.

Moreover, Hofstede (1968) contended that the use of budgetary control firstly started in the USA during the 1920s. Chandler (1962) argued that large diversified companies like Du Pont, Sears Roebuck and General Motors were using sophisticated management accounting systems which were essential for the co-ordination of multi-divisional organizations. He added that the centralized accounting system applied by Du Pont had two main objectives: firstly, to provide a tool for top management to control and coordinate the flow of operations among the company's three main departments (purchasing, manufacturing and sales); secondly, to help the top management in planning the company's long-term development. Johnson (1983) remarked the performance evaluation system of general Motors was mainly guided by financial standards. Therefore, all divisional managers were constantly under pressure to meet their financial targets and this, in turn, improved the operational performance. All these previously mentioned experiences are to stress on the fact that the role of businessmen and entrepreneurs in developing recent accounting techniques cannot be denied.

In addition, Kaplan (1984) and Sloan (1963) stated that General Motors accounting departments take the credit for developing many of the management accounting techniques that are still used in the current organizations nowadays like flexible budgeting and target return on investment (ROI) as well as the incentive system applied there which depended on rewarding different administrative levels that contributed to the outstanding performance of the company.

After the Second World War, Kaplan (1984) argued that the management accounting systems started to flourish, especially some new financial concepts such as the residual income (RI) which was used as a substitute for return on investment to overcome its drawbacks. He claimed that the focus of the management accounting literature has widened to include many new quantitative tools that are used in empirical analysis such as the regression analysis, linear and non linear programming, probability theory, hypotheses testing and decision making theory.

In the early 1970s, Anthony (1965) defined management control as “the process by which managers assure that resources are obtained and used, effectively and efficiently, in the accomplishment of the organization’s objectives”. Anthony stressed the importance of the behavioral sciences, especially social psychology, in understanding how the control systems actually affected the actions and decisions managers took within organizations. Afterwards, Lowe (1971) introduced his wider definition of management control. He stated that it is “A system of organizational information seeking and gathering, accountability and feedback designed to ensure that the enterprise adapts to changes in its substantive environment and the work behavior of its employees is measured by reference to a set of operational sub-goals so that the discrepancy between the two can be reconciled and corrected for”. Otley (1994) criticized this definition as being incomplete because he assumed a relatively constant environment in which operational sub-goals have a degree of stability.

The use of budgetary planning and control was criticized from the beginning of the late 70s as lacking strategic focus, encouraging short-term focusing, driving inappropriate behavior such as budgetary slack, encouraging local rather than organizational optimization (Wilcox and Bourne, 2003; MacArthur, 1996; Gosse, 1993; Kaplan and Norton, 1992; Simons, 1990; Hiromoto, 1988; Johnson and Kaplan, 1987; Millar and

Vollmann, 1985; Kaplan, 1983; 1984; Hopwood, 1974a). Till the beginning of the 90s, traditional management accounting was providing managers with information mainly expressed in terms of monetary terms in order to be used as a decision making tool (Neely, 1999; Cooper and Kaplan, 1991; Peters, 1987). However, recently new updates (high environmental uncertainty, increasing competition, technological developments, improvement initiatives, changing organizational roles and changing external demands) urged the need to change the traditional financial performance measurement techniques (Neely, 1999; Fisher, 1995b; Otley, 1994; Nanni et al., 1990; 1992).

It is argued that, historically, performance measurement systems had developed as means of monitoring and maintaining organizational control. By organizational control, it is meant the process of ensuring that an organization pursues and follows strategies that lead to the attainment and achievement of overall goals and objectives (Nani et al, 1990).

Since the late 1980s, the interest in the subject of performance measurement is rapidly increasing. This increasing interest has been driven by the increased rate of change in the business environment (Rejc, 2004; McAdam and Bailie, 2002). Moreover, Peters (1997) argued that the rate of technological advances, especially in computing and communication, served to revolutionize the way organizations worked.

According to Bourne et al. (2000), this rapid change has led to general dissatisfaction with traditional performance measurement methods identifying their shortcomings and demanding change. In summary, as Wilcox and Bourne (2003) contended that the late 80s and 90s have reflected this rapid change and consequently, the performance measurement systems and frameworks were developed to satisfy multiple stakeholders.

In 1990, Dixon et al. stated that inappropriate performance measurement system is considered a barrier to organizational development since an adequate performance measurement system provides the link between strategies and actions otherwise there will be a lack of congruency between actions and strategies.

In 1991, Eccles suggested that it would become increasingly necessary for all major businesses and organizations to evaluate and modify their performance measurement



systems in order to adapt to the rapidly changing and highly competitive business environment. He among others (Hronec and Andersen, 1993; Kaplan and Norton, 1992; Maskell, 1991; Johnson and Kaplan, 1987) questioned the dominant role of financial performance measurement systems and suggested the shift to treating them as one of the broader set of measures instead of treating them as the foundation for performance measurement.

Otley (1994; 2003) argued that management control is a key factor for any business organization as it provides the basis for all other activities and it helps retaining the organization's capability to survive in a dynamic and uncertain environment. In addition, Otley claimed that there was a movement from management control to performance management. Although the central issue in management control, which is helping to ensure that the organization is achieving its objectives, remained the same, yet, the way it is expressed has changed as has the context within which organizations function and operate. Major changes have been mainly in the philosophy of organizational structure.

Wisner and Fawcett (1991) were among the first to mention the need for performance measures to be reviewed and changed to ensure that those measures remain relevant. They highlighted the need to reevaluate the soundness and appropriateness of the already existing performance measurement systems in comparison to the contemporary competitive business environment.

In 1994, Meyer and Gupta stated that measures tend to lose their relevance and ability to differentiate between good and bad performance over time. They argued that failure to manage this change effectively causes the introduction of new measures that are weakly correlated with those currently in place so that an organization will have a diverse set of measures that may conflict in purpose and goal.

Bourne et al. (2000) suggested that measurement systems should be revised and reviewed. They argued that there is a need to review targets and performance against them to ensure that they reflect the strategic direction of the organization. Moreover, Bititci et al (2000) and Lynch and Cross (1995), they all stressed the importance of

having a dynamic performance measurement system to remain relevant and to reflect changes in the internal and external environment.

Several studies were conducted to investigate the relationship between the change of performance measurement techniques in any organization and the effect on the organization's share price (Hirschey et al., 2001; Hughes, 2000; Amir and Lev, 1996; Fornell et al., 1996; McConnell and Muscarella, 1985; Larcker, 1983). The previously mentioned studies are examples of researches that explore the relationships between the adoption of financial and/or nonfinancial measures of performance and the value of equity represented in the share price. However, a main obstacle to these studies is in isolating the effect of other variables and events like economic or political factors from affecting the share price.

### **3.3 Concepts Underlying Current Performance Measurement Theories**

Neely et al. (1995, p.80) defined performance measurement system as: " *A performance measure can be quantified as a metric used to quantify the efficiency and/or effectiveness of action*". He argued that the term effectiveness refers to the degree of attaining the required goal while efficiency refers to the speed with which the goal is achieved while taking into consideration the cost factor.

While Melnyk et al. (2003, p.3) define performance measure as: " *a performance measure is the instrument used to quantify the efficiency and/or effectiveness of action*". According to their definition, a performance measure is both quantifiable and verifiable. They also differentiated between a metric and a performance measure. They stated that a metric is more than a performance measure and it has three distinct characteristics:

1. It quantifies what is happening.
2. It indicates what is considered good and bad performance so it guides the direction of the organization.
3. It analyzes the consequences relating to being above, below or on target.

Performance measurement is a topic which is often discussed but rarely defined. Most scholars define contemporary performance measurement systems in terms of their

features. Extensive use of the word measurement in recent literature has led to some confusing and contradictory definitions and interpretations of performance measurement in organizations. The impact of contemporary performance measurement systems on firm performance requires further investigation as there is a lack of consistent evidence in this area. From a research point of view, there exists some knowledge about why organizations adopt the contemporary performance measurement systems. Yet, less knowledge exists about their actual consequences (Lee and Yang, 2011; Henri, 2006a; Hoque and James, 2000; Chenhall and Langfield-Smith, 1998). Performance measures are used to ensure that an organization is achieving its aims and objectives (Moxham and Greatbanks, 2001).

Performance measurement was developed as a means of monitoring and maintaining organizational control (Nani et al, 1990). It is defined as the process of ensuring that an organization pursues and follows strategies that lead to the achievement of overall goals and objectives (Tapanya, 2004).

Even with these definitions, performance measurement still remains as a broad topic. Johnson and Kaplan (1991) argued that an effective performance measurement system should provide timely and accurate feedback on the efficiency and effectiveness of operations. Talley (1991) and Edson (1988), they both stressed the need for performance measurement systems to draw more focus and attention on continuous improvement.

Regardless the approach adopted for performance measurement, the basic goal is essentially the same which is to make sure that organizations perform better and faster with less cost. High performing organizations seem to understand this basic principle and have developed highly effective performance measurement systems within their respective organizations (Harbour, 2011).

In fact, organization performance should be judged against a specific objective to see whether this objective is achieved. Without setting objectives, an organization would have no criteria for selecting among alternative investment strategies and projects (Armstrong, 2000).

Lee and Yang (2011) argued that performance measurement systems can provide integrated information for ameliorating the decision making process and lead to a better communication of strategic goals and hence affecting organizational performance.

Accounting measures of performance have been the traditional mainstay of quantitative approaches to organizational performance measurement. However, over the past two decades, a great deal of attention has been paid to the development and use of non-financial measures of performance, which can be used to motivate and report on the performance of business organizations (Neely, 2002).

Many researchers argued that the selection of performance measurement systems should be based upon several factors (McKenzie and Shilling, 2000; McMann and Nanni, 1994; Brown and Mitchell, 1993; Kaplan and Atkinson, 1989). Those factors are summarized as follows:

1. They should be driven from strategies and should provide a linkage between business functions.
2. They should be hierarchical and integrated across business functions.
3. They should be supportive of the organization's multidimensional environment.
4. They should be based on a thorough understanding of revenue-cost relationships.

Performance measurement, though extensively studied in the last two decades, has been given relatively little consideration in terms of the factors that affect the design and selection of performance measurement systems (Rejc, 2004).

Martins (2002) listed a number of points that he believes they represent the main characteristics of performance measurement systems. Those characteristics are:

- They should be congruent with competitive strategy and composed of financial and nonfinancial performance measures.
- They should provide direction and support to continuous improvement activities.
- They should provide support to identify tendencies and progress in performance.
- They should facilitate understanding of cause and effect relationships regarding performance.
- They should be intelligible to majority of employees.

- They should cover all the business process of the organization.
- They should provide real time information about performance.
- They should allow performance to be comparable against competitive benchmarks.
- They should be dynamic, efficient and effective measures in order to be adaptive to internal and external changes (Kaplan and Norton, 1992 and 1996).

### **3.4 Financial Performance Measurement Criticisms**

Neely (2002) argued that there are three different major functions for financial performance measures. The three main functions are:

1. Financial measures of performance are tools of financial management. This function is mainly concerned with the efficient provision and use of financial resources to support the wider aims of the organization, and to manage the effective and efficient operation of the finance section.
2. Financial performance is considered as a major objective of a business organization. The financial performance measures such as profit, return on assets, return on equity or economic value added is used to signify the achievement of an important (perhaps the most important) organizational objective.
3. Financial measures of performance are used as mechanisms for motivation and control within the organization. Here the financial information provides a window into the organization by which specific operations are managed through the use of the financial information in the assessment and control of organizations.

Financial performance measures are considered important and critical measures of strategic and tactical success. They can show the key elements contributing to the increase in shareholders wealth and value like profitability, spreads, credit risk, interest risk, capital value and expenses control (Karr, 2005).

Hofstede's study (1968) indicated that budgeting was the variable with the strongest effect on all measures of motivation. He asserted that there is a positive relationship between the participation in the budgetary process and the motivation to meet budgeted targets. He also added that though participation appeared to be important and necessary

yet not sufficient for high budget motivation because of other factors such as target levels achievability and supervisory style. His research asserted that; while budget emphasis increases budget motivation, pressure was also increased. And consequently, this attitude led to feelings of higher pressure and lower job satisfaction. He contended that this pressure might be relieved by the existence of continuous upward communication. He also asserted that budget participation has positive influence on managerial motivation and satisfaction. According to Hofstede, there is likely to be greater acceptance of budget goals if they are perceived as being under managers' personal control rather than being imposed externally.

Though financial performance is inevitably a major consideration, there has been increasing recognition that other important factors in the effective running of the organization cannot be well captured by such measures and this consequently urged the need for the development of non-financial performance measures (Neely, 2002).

Many authors agreed that one of the most important limitations of financial measures and budgeting is lagging indicators (Binnensley, 1996; Eccles and Pyburn, 1992). They indicated that though they are crucial for any company, the financial measures do not provide much insight into what must be done differently in the future or help in its prediction. Financial measures don't show the cause of management actions and organizational performance, they only show its results.

Goulian and Mersereau (2000) and Eccles and Pyburn (1992) argued that financial measures have an internal rather than an external focus. They stated that the financial measures fail to provide a comprehensive view of the organization's progress and growth and as a consequence they push the organization away from making long term-term investments in value. While Brignall and Ballantine (1996) asserted financial performance measures fail to assess and monitor multiple dimensions of performance simultaneously.

Hronec (1993), Kaplan and Norton (1992); Maskell (1991) and Johnson and Kaplan (1987) argued against judging performance based solely on financial criteria. They highlighted the failure of financial performance measurement systems to reflect changes in the competitive circumstances and strategies of modern organizations. They added

that the business environment today requires better information across a wider scope than that of the traditional financial measures to achieve a better understanding of the factors that create the basis of future success. They consider profit, though it remains the overriding goal, as insufficient performance measure as measures should reflect what organizations should do in order to profit.

Regardless all the criticisms pointed towards the use of financial measures, Simons et al (2000) argued that financial measures help the organization to transmit its strategies among its employees because strategies may sound attractive when they are spelled out in nice and bright phrases, however, actually strategies need to be translated into numerical and accounting figures in order to be able to evaluate how they actually create value.

Moreover, Binnensley (1996) explained the fact that when financial measures are used correctly, they can help everyone in the company to focus on the right things in the right place at the right time.

Lee and Yang (2011) argued that a performance measurement system that depends on the use of financial and non-financial performance measures as well as explaining the causal relationships between factors is considered a comprehensive approach for assessing the organization's performance.

### **3.5 Nonfinancial Performance Measurement Criticisms**

Nonfinancial performance measures are considered relevant. They are accounted for leading indicators of future financial performance and this appears to be reflected in stock prices and stock returns. Also, there is some evidence that there is an interactive effect between financial and nonfinancial measures which leads to an enhancement of the value of the financial performance measures and can be used as predictors of financial information. Yet nonfinancial measures were criticized by being very much descriptive in nature and they don't specify how they should economically relate to financial performance and stock prices. In addition, most companies often disclose financial information along with nonfinancial ones, thus making it difficult to isolate their separate effects (Maines et al, 2002).

Nonfinancial performance measures have been criticized for different reasons. It was argued that there are large numbers of measures and they are varied and different and this case results in companies facing a major problem when selecting the proper set of measures that suit their system and conditions. Specifically, there is variety in both the types of measures reported and format for reporting measures. Research also indicates that users of nonfinancial measures are hampered in their ability to use nonfinancial information due to the diversity in the types of measures and formats for reporting such measures. It was stated that the problem of using nonfinancial measures is mainly associated with comparability across companies and with time. Nonfinancial measures disclosed vary across companies and over time. Such non-comparability issue reduces the likely value of those measures and may lead investors to focus more on financial measures for assessing performance (Eccles, 2001; Upton, 2001; Flapper et al., 1997; Rangone, 1996; Medori et al., 1995).

Other authors contended that nonfinancial measures lack completeness. They mentioned that these measures are related to specific competitive dimensions such as customer satisfaction which is considered difficult to aggregate into a single overall measure. This creates a problem of choosing between focusing on a small number of measures, which might cause losing the global view of the organization or focusing on a large set of indicators, which is more difficult to handle and understand (Massella, 1994; Kaplan, 1983).

The stream of research on management accounting literature supported the idea that nonfinancial performance measures can be used as indicators for current or future financial performance (Zuriekat et al., 2011; Ittner and Larcker, 2003; Hughes, 2000). Consequently, it is necessary to address how nonfinancial performance measures are related to profit enhancement and organizational outcomes. They contended that the literature has proven consistent evidence suggesting that using more nonfinancial performance measures is associated with the adoption of manufacturing practices like total quality management and just-in time manufacturing. In contrast, linking nonfinancial performance measures to managerial performance evaluation and reward system needs more investigation (Berrah et al, 2006; Chenhall, 1997). In fact, Ittner and



Larcker (2001) argued that there is a lack of evidence on when and how nonfinancial measures improve managerial performance.

Zuriekat et al (2011) argued that further research is needed in order to attempt to explain the objectives of using the nonfinancial performance measures. He added that the inadequacies of the traditional financial performance measures have led organizations to concentrate more on the use of nonfinancial performance measures; however, these measures have also many disadvantages. These disadvantages more or less relate to the wide variety of those measures as well as the problem arising from choosing the appropriate measures given that there is no optimal mix of performance measures. Moreover, measuring the financial performance of any organization is somehow simple because there are many rules and guidelines to determine the financial measures to be used. However, the establishment of nonfinancial performance measures should be linked to target settings, also reward and incentives need to be considered more (Otley, 2001).

Zuriekat et al (2011) performed a study to investigate the use of variety of financial and nonfinancial performance measures identified in the literature of performance measurement systems. They concluded that financial performance measures continue to be an important aspect of performance measurement system. They added that these measures are supplemented with several nonfinancial performance measures. However, the type of nonfinancial performance measures used by organizations depends to a great extent on the perceived usefulness of the information that may result from using these measures in performance measurements and evaluation.

Based on the previously mentioned factors and due to the nature of this study, the researcher is going to adopt the financial performance measurement as a tool to assess the determinants of performance in Islamic banks.

Also due to the problems associated with comparability across companies and with time as nonfinancial measures disclosed vary across companies and over time; moreover, such non-comparability issue reduces the likely value of those measures (Eccles et al., 2001; Hodder et al., 2001; Upton, 2001; Flapper et al., 1997; Rangone, 1996; Medori et al., 1995). As a consequence, in order to be able to make an objective comparison

between the Islamic banks and the conventional banks, the researcher believes that the financial performance measures are more useful and reliable for making such comparison as they best serve the research objective.

### **3.6 Factors that Affect the Choice of Performance Measures**

Chenhall (2003) argued that the choice of appropriate performance measures is likely to be influenced by the several contextual factors identified in the contingency theory. Contingency theory suggests that the choice of appropriate techniques of managerial accounting depends on circumstances surrounding the firm (Otley, 1980; Hayes, 1977; Gordon and Miller, 1976). Zuriekat et al (2011) asserted that, in response to the debate relating to the advantages and disadvantages of considering financial or nonfinancial performance measures and the appropriate choice of measures, empirical evidence showed that financial and nonfinancial measures are not substitutes but nonfinancial measures can be used as additives to financial measures.

Some studies indicate that in order to design and implement an effective performance measurement technique successfully, some variables must be taken in consideration (Anthony and Govindarajan, 2000). They argued that *strategy* is one of the important variables that need to be well defined. All goals and objectives must be explicitly developed and communicated throughout the organization to ensure that all levels are aligned with this strategy. They suggested that in the following stage key performance measures need to be developed to support the articulated strategy. All these measures, supporting the organization's strategy, should be integrated with the organization's formal and informal structures, culture, and human resource practices. It is worth noting that these measures must be reviewed consistently and continually by top management to have feedback about how successful the strategy is.

Andrews (1996) specified there are two important factors that affect any type of measure used in any organization. The first factor is *corporate strategy*. He indicated that companies that adopted strategies founded on innovation and new product development tended to use nonfinancial measures. On the contrary, there are other companies opting financial measures and metrics especially those ones characterized by short product-repurchase cycles and tight profit margins.

It was argued that the importance and usefulness of nonfinancial performance measures is not universal, depending instead on firm-specific characteristics. Consequently, for some industries, models predicting future financial performance may not include nonfinancial performance measures (Ittner et al, 1997; Bushman et al, 1996).

The second factor according to Andrews (1996) is the *corporate governance structure*. This factor affects the firm choice regarding the use of financial or nonfinancial measures. He indicated that those companies whose shares are owned by institutional investors and by external board members prefer nonfinancial measures less than those companies whose equity is spread diffusely among many shareholders. In a nutshell, prior research suggests that organizations that align their performance measures appropriately with contingency factors achieve higher performance (Govindarajan, 1988; Simons, 1987).

Contemporary performance measurement pays attention to the particular characteristics of industries and organizations. Although, banks nowadays are becoming more and more complex in terms of its functionality, yet the key drivers of their performance measurement remain earnings, efficiency, leverage and risk taking (EUCB, 2010).

Waggoner et al (1999) introduced an important point related to the timing of changing the existing performance measurement system. They summarized the key forces driving and demanding changes in the existing system. These forces are: customers, information technology, the marketplace, legislation, new industries, nature of work and future uncertainty. According to them, the previously mentioned forces act as a kind of trigger, either internal or external, that starts the process of performance measurement transformation.

Profitability in banks is considered the first line of defense against unexpected losses. Solid profitability position in banks strengthens its capital position and improves its expected future profitability levels through the investment of the retained earnings. If a bank's income statement is persistently exhibiting losses, this will finally lead to a depletion of its capital base, and in turn, this will jeopardize the bank's position and consequently puts the equity-holders and debt-holders at risk (EUCB, 2010).

Profit is the bottom line or ultimate performance result showing the net effects of bank policies and activities in a financial year. The trends in stability and growth of profit are the best indicators of a bank's performance in both the past and the future (Greuning and Iqbal, 2008).

### **3.7 Previous Studies on Banks' Performance Measurement**

In the new economic environment, the bank's performance evaluation is a comprehensive assessment process. Those banks that are concerned with assessing the financial performance using financial indicators are easy to create short-term behavior and quick reactions and affect their long-term development plans; while those banks that overemphasize the significance of the non-financial indicators for assessment may result in a lack of financial flexibility and eventually results in financial failure and distress. However, the combination of the financial and non-financial indicators can result in a full range of a comprehensive strategic performance appraisal system (Hongbo and Fangfang, 2010). Yet, most of the researchers studying banks performance adopted financial measurement tools as it is more suitable to examine and test the banks performance.

Much has been written on the history and principles of Islamic banking and finance. The literature is long on pros and cons on an abstract level, but a bit short on a practical one. Studies on Islamic finance and economics can be divided into three stages. The first is descriptive, consisting mainly of historical discussions of the nature of an economic system based on the percepts of Islam and its institutions. The second examines the theoretical framework of such a system using modern tools of analysis. The third, which is very much in its infancy, focuses on evaluating the experience of economies which either, totally, reformed and adopted their financial system to be according to the Islamic law and Shariah (like Sudan, Iran and Pakistan) or have Islamic financial institutions performing within the boundaries of its conventional economic, legal and financial systems (Ahmed, 1989). Yet, there is a serious lack of empirical studies on Islamic banking performance and the determinants of profitability (Iqbal, 2001).

The problem is that few studies really tackled the area behind the scene regarding the actual operations of this unusual banking scheme. The actual operations of a banking system are mainly about the asset-liability management of the bank. An efficient asset-liability management requires maximizing banks' profit as well as controlling and lowering various risks. Early literature on Islamic banking and finance focuses primarily on the viability and sustainability of Islamic finance. The literature shows that the performance of Islamic banking has been measured in a variety of ways.

Recent studies address various aspects of the Islamic financial industry. Zaher and Hassan (2001) provide a comprehensive comparative review of the literature on Islamic finance, giving a preliminary empirical assessment of the industry in a cross country context and highlighting the challenges that lie ahead.

Aggarwal and Youssef (2000) examined the financial instruments used by Islamic banks. They found that Islamic banks rarely offer long-term financing to entrepreneurs seeking capital. The majority of the Islamic banks' financial transactions are towards retail or trade financing. Instead, most of the financing is based on the markup principle, and is very debt-like in nature. The main implications of our analysis are that economies characterized by adverse selection and moral hazard will be biased towards debt financing. As these problems become more severe, debt will become the dominant instrument of finance. Thus, the use of debt-like instruments is a rational response on the part of Islamic banks to informational asymmetries in the environments in which they operate.

Tamanni (2002) analysed the performance of Islamic banking operations at 3 foreign banks in Malaysia in order to evaluate performances of Islamic Banking Scheme (IBS) versus its conventional counterpart. He discovered that return on Assets (ROA) of the foreign banks' IBS was considerably higher than that of their counterparts, and this shows that the Islamic banking operations have been more profitable than the conventional ones. On average, ROA of the IBS was more than 1.58%, while the conventional banking at large was only 0.80% during 1996-2000. He also concluded that, Islamic banking operations at foreign banks have been performing considerably well in 1996-2000, during and post the Asian crisis.

Alam (2003) made a new attempt to compare the Islamic and the conventional banking systems based on an institutional-network theoretical framework. He used the characteristics of the components of Whitley's (1992b) business system and structured institutional-network framework to study the differences in the economic activities between Islamic banks and other conventional banks. The research applied was of a qualitative nature only. In his study, he tackled only the managerial aspects of the differences between the Islamic and conventional banking system. He even referred to the risk management from the point of view of risk sharing among junior and senior staff levels.

Metwally (1997), Samad and Hassan (1999), Iqbal (2001), Samad (2004) and Ariss (2009) evaluated the performance of Islamic banks in comparison to conventional banks by analyzing the financial ratios.

Metwally (1997) in his study was mainly focusing on finding out if the application of the profit/loss sharing principle results in any structural difference between interest-free banks and conventional banks in terms of five financial dimensions which are; liquidity, leverage, credit risk, profitability and efficiency. By using the financial ratios technique, he discovered that there is almost no difference between the Islamic and conventional banks in what concerns efficiency and profitability while, there is a remarkable difference in the ability of attracting deposits and granting loans in favor of the conventional banks. He concluded that the two groups of banks may be differentiated in terms of liquidity, leverage and credit risk. He argued that interest-free banks rely more heavily on their equity in loan financing and face more difficulties in attracting deposits than interest-based banks. Interest-free bank hold a higher Cash/deposit ratio because they tend to be relatively more conservative in using their deposits funds and lack lending opportunities. The profit/loss sharing principle has made it difficult for interest-free banks to finance personal loans and pushed interest-free banks to channel a greater proportion of their funds to direct investment (using Musharakah and Mudarabah tools of finance). He added that, both banks offer their depositors similar returns and direct the largest proportion of their funds towards the financing of durables. Interest-free banks rely heavily on the Murabahah mode of finance which is same as charging interest and is based on the use of a mark-up.

In their exploratory study of Bank Islam Malaysia Berhad (BIMB) in 1999, Samad and Hassan also used the financial ratio analysis of major financial indicators to investigate the performance of BIMB in comparison to a group of 8 conventional banks for the period 1984-1997. The results suggested that, in general, the management's lack of knowledge was the main reason for the slow growth of loans under profit sharing. Despite that, the bank was found to perform better compared to their conventional counterparts in terms of liquidity and risk measurement. They found that BIMB is relatively more liquid and less risky compared to a group of 8 Conventional banks.

Iqbal (2001) had evaluated the performance of Islamic banks using both trend and ratio analysis in comparison to a group of conventional banks of equivalent size during the period from 1990-1998. He studied deployment efficiency in addition to profitability, liquidity, risk and capital adequacy. He found that, generally, Islamic banks have done fairly well during the period under the study. Based on the key financial ratios used in the study, he found that Islamic banks are well capitalized, profitable and stable. He added that Islamic banks are not suffering from excess liquidity and are more cost effective and profitable than their Conventional counterparts. While, Ariss (2009) found that, there are no significant differences in profitability levels across Islamic and conventional banks. Also, it was found that Islamic banks have lower financial risk due to their high dependability on equity and they exhibited lower competition too in comparison with the conventional banks.

Samad (2004), basing his study on the banking system in Bahrain, he compared the performance of Islamic banks with conventional banks during the post Gulf War period with respect to profitability, liquidity risk, and credit risk depending on the use of nine financial ratios. He, same as the previous researchers, discovered that there is no major difference in the performance of Islamic relative to conventional banks with respect to profitability and liquidity. In addition, Islamic banks are exposed to less credit risk compared to conventional banks. Their credit performance is superior to that of conventional banks.

Chapra (2008) argued that, the way the Islamic financial system has progressed is only partly, but not fully, in harmony with the Islamic vision. It has not been able to fully to get out of the stereotype modes of functioning of the conventional system. The use of

equity and profit and loss sharing modes has been insignificant, while that of the debt-creating sales- and lease-based modes has been predominant. Moreover, even in the case of debt-creating modes, all Islamic banks and branches or windows of conventional banks do not necessarily fulfill the conditions laid down by the Shariah. They try to adopt different legal stratagems to transfer the entire risk to the purchasers (debtors) or the lessees. The result is that the Islamic financial system, as it is being practiced, does not appear to be a genuine reflection of what it is expected to be.

Chapra (2008) also added that the Islamic financial system has so far been able to gain a very small share of the global financial market and, even if it operates perfectly as desired by the Shariah, it may not be able to create a significant impact on the international financial system in the near futures. The only option to overcome this problem is for the Muslim countries to explain the Islamic system rationally to create a conviction about its superiority. This will be more effective if they themselves implement the system seriously in their own countries to practically establish the effectiveness in promoting financial health and stability.

In accordance with the above argument is the critique of Kamla (2009) who mentioned that Islamic banks' failure to significantly employ profit and loss sharing techniques is due to their recognition that they lack the skills to distinguish between good and bad opportunities. They fear that if they employ those techniques to lending, they will make bad choices and end up with more losses than profits.

Kader et al. (2007) examined the performance of UAE Islamic banks for five years from the period 2000-2004. In order to test the performance of Islamic banks in comparison with the conventional banks, eleven financial ratios were used to measure banks' performance, which concentrated on the profitability, liquidity, risk and solvency, and efficiency of the banks. The study found that Islamic banks in the UAE are different from conventional banks from the perspective of the financial performance. The UAE Islamic banks are relatively more profitable, less liquid, less risky and more efficient compared to the UAE conventional banks.

Yet, an interesting research performed by Chong and Liu in 2008 showed that Islamic banking, as it is practiced today, is very similar to conventional banking in Malaysia.



They also found that changes in conventional deposit rates cause Islamic investment rates to change, but not vice versa. They believe the reason behind these results is that the actual implementation of Islamic banking paradigm is constrained by competition from conventional banking practices. In accordance with this justification, Obaidullah (2005, p.17) argued that:

*"It must be recognized however that Islamic financial institutions face a kind of "withdrawal risk" that mainly results from the competitive pressures an Islamic financial institution faces from existing Islamic or conventional counterparts. An Islamic bank could be exposed to the risk of withdrawals by its depositors as a result of the lower rate of return they would receive compared to what its competitors pay."*

Moreover, the same above results were reached previously by Haron and Ahmad (2000). Their study provided evidence regarding the relationship between the amount of deposits placed in the Islamic banking system in Malaysia and returns given to these deposits. The findings confirmed that customers who place their deposits at saving and investment account facilities are more or less guided solely by the profit motive. The negative relationship between interest rate of conventional banks and the amount deposited in interest-free deposit funds confirmed the existence of the utility maximization theory among Muslim customers. They argued that Muslims should be guided only by Islamic Shariah and not by profit maximization in dealing with Islamic banks.

Awan (2009) has done a study to compare the asset quality of conventional banks and Islamic banks. He conducted this comparison by using a ratio of loan-loss reserve to gross loans, impaired loan over total loans, the percentage of net charge-off (NCO) to gross loans, ratio of NPL to advances/financing, ratio of provisions to NPLs and ratio of NPLs to deposits. Finally, the results of the research showed that Islamic banks have more productive and efficient asset quality than conventional banks since Islamic banks have low default rate and healthier balance sheet.

Jaffar and Manarvi (2011) conducted a study to examine and compare the performance of Islamic and conventional banks operating inside Pakistan for the period 2005-2009 by analyzing the CAMEL factors. The CAMEL is a standard test to check the health of

financial institutions and to compare the performance of Islamic and conventional banks. They concluded that Islamic banks performed better in possessing adequate capital and better capital position while conventional banks outperformed in liquidity management and profitability. Both types of banks didn't show any remarkable differences concerning the asset quality.

Hanif et al (2012) performed a comparative study to analyze the performance of Islamic and conventional banking in Pakistan. They collected a sample composed of 22 conventional banks and 5 Islamic banks. The study was conducted on two phases. The first phase consisted of financial analysis for five years (2005-2009) and included profitability, liquidity, solvency and credit risk. The second part of the study, they used a customer survey consisting of 200 questionnaires filled in by customers representing five Islamic banks and five conventional banks. The results showed an outperforming of conventional banks in profitability and liquidity while Islamic banks showed superiority in credit risk and solvency. The qualitative part of the study conducted through the survey exhibited results that supported the ones of the quantitative study.

Rozzani and Abdul Rahman (2013) conducted a study in Malaysia to examine the performance of Islamic and conventional banks using CAMELS rating. They used a sample of 109 conventional banks and 16 Islamic banks for a period from 2008-2011. They eventually concluded that the levels of performance of Islamic and conventional banks in Malaysia are to a large extent very similar. No significant differences were detected between the performances of both types of banks.

In 2013, a study was done by Eljelly and Elobeed in an attempt to describe the common performance traits and characteristics of banks operating in a whole Islamic banking system in Sudan. They selected a sample composed of nine Islamic banks representing the most active and large banks in Sudan. The study applied factor analysis to a set of 19 financial ratios that are commonly used in banks covering the period from 1998-2007. The results of this study showed that six variables explained the variation of the financial ratios used. Those factors are profitability, capital adequacy, liquidity risk, coverage, efficiency and control; moreover, these variables displayed also stability over time.

Wasiuzzaman and Gunasegavan (2013) had done a study to analyze the differences that exist in bank characteristics of Islamic and conventional banks in Malaysia. The characteristics used to compare between the two types of banks are profitability, capital adequacy liquidity, operational efficiency and asset quality. They also included the corporate governance and economic conditions to test for their effect. Their sample consisted of a total of nine conventional banks and five Islamic banks over the period of 2005-2009. Firstly, they conducted descriptive statistics to understand the differences that exist in the characteristics of both types of banks. Afterwards, a t-test was performed to assess the significance of those differences. At the end, they performed a regression analysis to analyze the determinants of profitability of the Islamic and conventional banks. The results showed supremacy of conventional banks in ROA, bank size and board size, while Islamic banks outperformed conventional banks in operational efficiency, asset quality, liquidity, capital adequacy and board independence. The results were significant for all the variables included in the analysis except for profitability and board independence. The regression analysis results showed that all the variables except for liquidity, board characteristics and type of bank were found to be highly significant in affecting profitability of both banks.

It is clear from the above presentation of those previous studies that the center of focus of these papers was more or less around the measurement of banks financial indicators with the financial ratio technique using various statistical tools to analyze them. It is clear that this empirical work has relied mainly on the analysis of descriptive statistics. The majority of the empirical studies have reached almost the same conclusions and they are more or less consistent concerning the performance of Islamic banks.

In addition, many studies tested the efficiency of the Islamic banks like the ones of Sarker (1999), Sufian (2007), Brown (2003) and Hassan (2005). Sarker examined the performance and operational efficiency of Bangladeshi Islamic banks and he argued that Islamic banks can provide efficient banking services if they are supported with appropriate banking laws and regulations. He added that Islamic banks can survive even within a conventional banking architecture in which profit and loss sharing modes of finance is less dominated however, Islamic cannot operate with its full efficiency level if it operates under a conventional banking framework; their efficiency goes down in a

number of dimensions. The deterioration is not because of Islamic banks' own mechanical deficiencies; rather it is the high efficiency of the conventional banking system that puts obstacles to efficient operations of Islamic banks.

In his study, Brown measured the performance of Islamic banks for a number of countries over a period that extends from 1998 to 2001 and he found that a decreasing in the number of fully efficient countries from six in 1998 to 1 in 2001.

While the study of Brown was a cross-countries one and the study of Sarker examined the situation in Bangladesh, Sufian investigated the performance of the Malaysian Islamic banking sector. The study found that foreign banks in Malaysia have exhibited higher technical efficiency compared to their domestic peers. He argued that this is due to the foreign banks' small size, their lower market share and consequently, their relatively lower problem loans. Also, at the efficiency level, he found that the window-based Islamic banking operations performed better than the full-fledged Islamic banks and this is due to the improving technical efficiency of the conventional banks offering Islamic banking products and services than for the full-ledged Islamic bank.

In addition, Hassan (2005) used a panel of interest-free banks from 22 countries. He found that that interest-free banks were relatively less efficient in controlling cost than conventional counterparts but they are efficient in generating profit. He used bank size, profitability and loan to asset ratios to measure efficiency. The reason of less efficiency of interest-free banks is that they often face regulation not favorable to Islamic transactions in most countries.

Typically, studies on Islamic banking efficiency have focused on theoretical issues and the empirical work has relied mainly on the analysis of descriptive statistics rather than rigorous statistical estimation (El-Gamal and Inanolgu, 2005).

El-Gamal and Inanolgu (2005) used the stochastic frontier approach to estimate the cost efficiency of Turkish banks over the period 1990-2000. The study compared the cost efficiencies of 49 conventional banks with four Islamic special finance houses. Overall, they found that the Islamic financial systems to be the most efficient. They, further, extended their earlier study in 2005 by providing an alternative method for evaluating

bank efficiency scores. They examined the cost efficiency of Turkish banks throughout the nineties. They distinguished between groups of banks that have different production technologies. They found that the Islamic financial firms have the same production technology as conventional banks and they concluded that the Islamic firms are among the most efficient.

Also, Shawtari et al (2015) performed a study to examine the efficiency of the banking industry in Yemen. They conducted a comparison between all Islamic and conventional banks for the period 1996-2011. The sample constituted the 16 commercial banks working in Yemen which is composed of 4 Islamic banks and 12 conventional banks. The empirical results of the study showed that the efficiency of the banking industry in Yemen was decreasing in general accompanied with increasing instability during the later period of the research. Additionally, they concluded that conventional banks were characterized by stability though with inefficiency while Islamic banks proved to be more efficient over time. Moreover, the results showed that loan/financing and profitability are the common key determinants of efficiency for both types of banks. However, the other determinants of efficiency used in this study have different impacts for Islamic and conventional banks.

Several studies that have been devoted to assess the performance of Islamic banks have generally examined the relationship between profitability and banking characteristics. The very first researcher who felt that internal banking variables are the part of profitability was Bourke (1989). The research studied the performance of banks in twelve countries in Europe, North America and Australia. The study employed the capital ratios, staff expenses and liquidity ratios and measured its effect on profitability level of banks. The dependent variables were comprised of the net profit before taxes against total capital ratio and net profit before taxes against total assets ratio. According to Bourke these internal variables were related to the profitability positively. This research by Bourke was later performed by Molyneux and Thornton (1992) who confirmed the same results.

Moreover, Bashir (1999) examined the effects of scale on the performance of Islamic banks. He used the agency and financial intermediation theories as the theoretical frameworks for the study. He used data from two Sudanese banks. The relationships

between size and profitability measures are statistically significant indicating that Islamic banks become more profitable as they grow in size. However, the negative relationship between size and the ratio of equity to capital implies that the larger bank is systematically highly levered. Moreover, he found a significant negative relationship between size and the risk index inferring to large size banks are economically efficient.

Furthermore, Bashir (2000) performed regression analysis to test the underlying determinants of Islamic bank performance. The data used in this study are a cross-country bank-level data, compiled from income statements and balance sheets of 14 Islamic banks during the period 1993-1998 in eight countries from the Middle East region. The paper shed some light on the relationship between banking characteristics and performance measures in Islamic banks. Four measures of performance were used in this study; which are the net non-interest margin (NIM), profitability (BTP/TA), returns on assets (ROA), and returns on equity (ROE). He argued that the Islamic banks profitability measures respond positively to the increases in capital and loan ratios. It indicates that adequate capital ratios and loan portfolios play an empirical role in explaining the performance of Islamic banks. Second, the results also indicate the importance of customer and short-term funding, non-interest earning assets, and overhead in promoting banks' profits. Also, he added that, as the Islamic banks grow in size, the operating risk decreases.

In his attempt to conclude the major determinants of profitability in Islamic banks and how the bank characteristics and the overall financial environment affect the performance of Islamic banks, Bashir (2003) found that the Islamic banks' profitability measures respond positively to the increases in capital and loan ratios. While the new aspect of the study above the previous ones were the results that indicated that foreign-owned banks are likely to be profitable and that taxes affect the bank performance and profitability negatively while favorable macroeconomic conditions impact performance measures positively. The same results were confirmed in the study performed by Hassan and Bashir in 2003 who examined the determinants of Islamic banks' profitability. Their paper analyzed how bank characteristics and the overall financial environment affect the performance of Islamic banks. Utilizing bank level data, the study examines the performance indicators of Islamic banks' worldwide during 1994-2001. A variety of

internal and external banking characteristics were used to predict profitability and efficiency. In general, their analysis of determinants of Islamic bank profitability confirms previous findings.

Mamatzakakis and Remoundos (2003) examined the determinants of the performance of Greek commercial banks from 1989 to 2000. They measured the profitability of the commercial banks using the ratios of return on assets (ROA) and return on equity (ROE). They considered internal factors, like management policy decisions and external factors, like economic environment to explain the performance of the banks. The results suggested that the variables related to management decisions assert a major impact on the profitability of Greek commercial banks.

In 2004, Olson and Zoubi tried to determine whether Islamic and conventional banks in the GCC region are distinguishable from one another on the basis of financial characteristics alone. They compared data for 141 conventional and 96 Islamic banks operating in the GCC during the period 2000-2005. They used five groups of financial ratios to test profitability, efficiency, asset quality, liquidity and risk. The empirical results of this study indicated that measures of bank characteristics are good discriminators between Islamic and conventional banks in the GCC region. They concluded that the data reveals that most accounting ratios are similar for Islamic and conventional banks. Nevertheless, some financial characteristics of Islamic banks are different from those of conventional banks. Results from their classification models implied that the operational characteristics of the two types of banks may be different. Islamic banks are more profitable than conventional banks, but probably not quite as efficient. They discovered that non-linear classification techniques are able to correctly distinguish Islamic from conventional banks in out-of-sample tests at about a 92% success rate.

Pasiouras and Kosmidou (2007) examined how bank's specific characteristics and the overall banking environment affect the profitability of commercial domestic and foreign banks operating in the 15 European Union countries over the period 1995-2001. This study used return on average assets (ROAA) to evaluate bank's performance. Four bank characteristics are used as internal determinants of performance which are total assets, the cost to income ratio, the ratio of equity to assets, the ratio of bank loans divided by

customers and short term funding and bank size. In addition, six external determinants were used to examine the impact of environment on bank's performance. Two sets of variables have been considered in this study, indicating macroeconomic conditions and financial structure characteristics. The two macroeconomic variables used are gross domestic product growth and inflation. In order to examine this study used the ratios stock market capitalization to GDP, stock market capitalization to total assets of deposit money banks, total assets of deposit money banks to GDP and banking industry concentration. Their sample is a balanced panel of 584 commercial banks operating in the 15 European countries over the period 1995-2001. The results indicated that profitability of both domestic and foreign banks is affected not only by bank's specific characteristics but also by financial market structure and macroeconomic conditions. Capital strength and efficiency in expenses management were found to be the main determinants of ROAA in all cases as the relatively high significant coefficients of the equity to assets and cost to income ratios showed. Equity to assets was positively related to ROAA and appeared to be the most significant determinant of profitability. The impact of the indicators of macroeconomic conditions on ROAA is significant in all cases.

Inflation rate is one of the important determinants of banks' profitability. Revell (1980) argued that inflation is a major factor that influences the profitability of banks. This hypothesis was empirically tested by many studies. Boyd, Levine and Smith (2000) used various regression techniques in their studies and found that there is a strong nonlinear relationship between inflation and financial sector performance. Boyd et al (2000) concluded that inflation is statistically significant and negatively related to the financial sector performance. Izhar and Asutay (2007) and Haron and Azmi (2004), they all used the Consumer Price Index as a proxy for inflation in their studies of banks' profitability. However, they found that the inflation is positively related to the profitability measures, and this further confirmed the work of Haron (1996) and Molyneux and Thorton (1992). In the study of Heggsted (1977), the author tried to measure the impact of inflation on profitability indirectly. Instead of using Consumer Price Index as a proxy for inflation, Heggsted used per capita income as an independent variable. However, Heggsted found that there is no relationship between per capita income and banks' profitability.



In 2003, an important study was conducted by Ben Naceur to investigate the profitability determinants of the Tunisian banking industry performance. He investigated the impact of banks' characteristics, financial structure and macroeconomic indicators on banks' net interest margins and profitability in the Tunisian banking industry for the period from 1980-2000. He used ROA and NIM as the measures of performance and used five banks' characteristics as internal determinants of performance which are the ratio of overhead to total assets, the ratio of equity capital to total assets, the ratio of bank's loans to total assets, the ratio of noninterest bearing assets to total assets and the log of bank assets. And two macro-economic variables were used as control variables namely: inflation and GDP per capita growth. He used the regression analysis to empirically test this study. He concluded that individual bank characteristics explain a substantial part of the within-country variation in bank interest margins and net profitability. High net interest margin and profitability tend to be associated with banks that hold a relatively high amount of capital, and with large overheads. Other important internal determinant of banks' interest margins is bank loans which have a positive and significant impact. The size has mostly negative and significant coefficients on the net interest margins. This latter result may simply reflect scale inefficiencies and also he suggested that inflation and growth rates are insignificant variables and have no impact on banks' profitability and interest margin. Moreover, he found that concentration is less beneficial to the Tunisian commercial banks than competition and stock market development has a positive effect on bank profitability reflecting the complementarities between banking and stock market growth.

Peters et al. (2004) analyzed the performance and balance-sheet characteristics of banks in post-war Lebanon for the years 1993 to 2000 and for a control group of banks from five other countries in the Middle East for the years 1995 through 1999. They employed the accounting return-on-equity (ROE) model to investigate profitability and leverage. The components of bank profitability are analyzed by focusing on net interest margin (NIM). This study employed regression models that relate bank profitability ratios to various explanatory variables. This study tests the relationships between bank profitability and size, asset portfolio composition, off-balance sheet items, ownership by a foreign bank, and the ratio of employment to assets. The results suggested that cross-sectional variation among banks play a major role in explaining ROA. Their models

show a strong association between economic growth and bank profitability, whether measured by ROE or ROA. They found that Lebanese banks are profitable, but not as profitable as a control group of banks from five other countries located in the Middle East.

Kosmidou et al. (2006) investigated the impact of bank-specific characteristics, macroeconomic conditions and financial market structure on UK owned commercial banks' profits, measured by return on average assets (ROAA) and net interest margins (NIM). An unbalanced panel data set of 224 observations, covering the period 1995-2002, provided the basis for the econometric analysis. The five measures used as internal determinants of performance are: cost to income ratio as an indicator of efficiency in expenses management; ratio of liquid assets to customer and short term ratio of loan loss reserves to gross loans as an indicator of banks' asset quality; ratio of equity to total assets representing capital strength; and the total assets of a bank representing its size. Turning to external determinants, four measures were considered, two of which represent the influence of macroeconomic conditions and the other two of financial market structure. The results showed that capital strength, represented by the equity to assets ratio, is the main determinant of UK banks profits. The other significant determinants are cost-to-income ratio and bank size, both of which impact negatively on bank profits.

Also in 2009, Zantioti conducted a study to assess the effect of macroeconomics indicators on banks' profitability. Instead of merely using GDP as the determinant of banks' profitability, he included GDP growth, bank credit/GDP and GDP per capita in his studies of Islamic banking performance. Zantioti found that GDP growth, bank credit/GDP and GDP per capita are significant in explaining the worldwide Islamic banks' profitability. The results suggest that GDP growth is a banks' profitability major determinant in Middle East and North Africa. However, GDP growth is positively related to the banks' profitability in the Middle east while is negatively related to banks' profitability in North Africa. In other hands, GDP per capita related directly and positively to the profitability of banks in North Africa.

Athanasoglou et al. (2006) examined the profitability behavior of bank-specific, industry-related and macroeconomic determinants, using an unbalanced panel dataset of

South Eastern European (SEE) credit institutions over the period 1998-2002. Return on assets and return on equity are chosen as proxies for bank profitability. Among the independent variables analyzed were liquidity, credit risk, capital, operating expense management, size, concentration, inflation, and economic activity. The least squares methods of fixed effects and random effects models were applied in the analysis. The estimation results indicated that, with the exception of liquidity, all bank-specific determinants significantly affected bank profitability in the anticipated way. A key result is that the effect of concentration is positive on profitability, which provides evidence in support of the structure-conduct performance hypothesis. In contrast, a positive relationship between banking reform and profitability was not identified, whilst the picture regarding the macroeconomic determinants is mixed.

Furthermore, Kosmidou et al. (2008) performed a study to examine the determinants of profits of Greek banks operating abroad by developing an integrated model that includes a set of determinants informed by the literature on the profitability of both multinational and domestic banks. The study used a panel dataset for 19 Greek bank subsidiaries operating in 11 nations, covering the period from 1995 to 2001. This study used return of assets (ROA) as the dependent variable. The internal bank-specific characteristics that were included represent information about asset quality, liquidity, capital strength, expenses management, asset quality and size. They considered three external determinants, market concentration, stock market capitalization and market share. Among the five multinational variables listed under this category, three are location-specific, and two are ownership-specific. The results showed that the combined set of variables leads to an improvement in the overall explanatory power of the integrated model, compared to a model estimated only with the multinational determinants of Greek bank profitability. Moreover, it was found that high ROA is associated with well capitalized banks and lower cost to income ratios. The size variable was found to be positive in all cases; however, it is statistically significant only when the macroeconomic and financial variables entered the models, while, inflation had a negative and significant influence on profitability.

Heffernan and Fu (2008) identified the determinants of Chinese banks' performance and assessed whether recent reforms had any effect on the profitability level. The sample

covered 76 banks between 1999 and 2006. Ten bank-specific independent variables and three macroeconomic explanatory variables were analyzed in this study. They used four dependent variables as the performance measures of banks namely; economic value added (EVA), return on average assets (ROAA), return on average equity (ROAE), and net interest margin (NIM). The results showed that cost to income ratio has a negative significant effect on profitability. On the contrary, loan loss reserve ratio (LLR) produced a positive and significant coefficient. The results also reported that the macroeconomic variable that performed best in this study is the real GDP growth rate, followed by the unemployment rate. The study also looked at the question of which of four performance measures work best and concluded that, the results suggested the best dependent variables are economic value added and the net interest margin, as against ROAA or ROAE.

In 2010, Wasiuzzaman & Tarmizi have examined the determinants of the profitability of sixteen Islamic banks in Malaysia during the period from 2005-2008. The study has found out that capital and asset quality have an inverse relationship with bank profitability, while liquidity and operational efficiency have a positive influence. The GDP and inflation have a positive relationship with bank profitability. Furthermore, Wasiuzzaman & Tarmizi proposed an important argument relevant to the inflation rate and its effect on profitability. They argued that the effect of inflation on banks' profitability depends on whether the inflation is anticipated or unanticipated. If the inflation is anticipated, the bank can adjust the interest rate accordingly. Thus, the bank's revenue will increase faster than costs and eventually increase the banks' profitability. However, if inflation rate is unanticipated and the banks are most probably not able to adjusting their interest rate promptly, this will eventually affect the banks' profitability adversely as the bank costs may increase faster than bank revenues. In line with the same context, Vong and Chan (2009) argued that macroeconomic variables like the inflation rate will affect the banks' profitability in Macao. In their study, they found that the inflation rate had a strong impact on the banks' Return on Assets. The bank management has to anticipate the inflation rate and react accordingly in order to be profitable in inflationary environments.

Later, Idris et al., (2011) found that the bank size is the most important factor in explaining the variation of profitability for Islamic banking institutions in Malaysia by using nine Islamic banks for the period of 2007- 2009. These results are consistent with the results of Bashir (1999) concerning the effect of size on the determination of profitability in Islamic banks.

In line with this study, Sufian & Habibullah (2010) examine the determinants of Indonesian banks' profitability during the period of 1990–2005 using return on the asset as a proxy for profitability. The findings indicate that size and overhead costs are negatively related to bank profitability. The impact of economic growth and banking sector concentration are positive during the pre-crisis and crisis periods. Moreover, the Asian financial crisis exerts a negative and significant impact on the profitability of Indonesian banks.

Al-Tamimi (2010) made a comparison of the factors that affected the profitability of Islamic banks in comparison with conventional banks for the period of 1996 to 2008 in UAE. The regression model used ROA and ROE as the dependent variables and a set of internal and external factors represented in GDP, bank size financial development indicator (FIR), liquidity, asset concentration, cost of funds and number of branches as the independent variables. The result has identified that the liquidity and asset concentration are the most significant factors for the conventional bank, while the most significant factors for the Islamic bank are the cost of funds and number of branches which affected the financial performance of Islamic bank.

Parashar and Venkatesh (2010) were interested in discovering how well Islamic banks performed during crisis. They compared the performance of 6 Islamic banks and 6 conventional banks in the GCC region for a period of 2006–2009 utilizing 6 ratios namely; capital asset ratio, cost to income ratio, return on average assets, return on average equity, equity to total assets and liquid assets to total assets. Their study shows that during the global crisis, Islamic banks suffered more in terms of capital ratio, leverage and return on average equity, while conventional banks exhibited a poor performance in return on average assets and liquidity. Generally, they concluded that, during the 4 year period of 2006–2009, Islamic banks have outperformed conventional banks in the region.

Javaid et al., (2011) examines the determinants of bank profitability in Pakistan. They used a panel data during the period from 2004 to 2008. The study analyzed the determinants of profitability of the top 10 banks in Pakistan. The pooled Ordinary Least Square method was used to investigate the impact of assets, loans, equity and deposits on ROA. The results showed that higher total assets may not necessarily lead to higher profitability because of diseconomies of scale. Moreover, equity and deposits had a significant effect on performance. Finally, the study didn't detect a significant impact of loans on profitability.

Khrawish et al., (2011) investigated the factors that might affect the Jordanian Islamic banks' profitability during the period of 2005 to 2009. The analysis revealed that there is a significant and negative relationship between ROA and the bank size, total liabilities, GDP growth rate and Inflation rate. At the same time, Smaoui and Ben Salah (2011) used panel data of 44 Islamic Banks in the Gulf Cooperation Council over the period of 1995-2009 to examine the determinants of profitability. The results found that capital strength is positively related to the profitability of Islamic Banks, but the impact of liquidity on bank profitability is insignificantly related. The results also showed that overhead and efficiency are negatively and significantly related to profitability, whereas the results of GDP growth, inflation and size are found positively and significantly related to bank profitability.

In 2011 Akhtar, Ali and Sadaqat performed a research to identify the factors affecting the profitability of Islamic banks in Pakistan for the period 2006-2009. They used ROA and ROE as the independent variables measuring profitability. They found that the ratio of lending over capital (gearing ratio) and the capital adequacy ratio (CAR) has a significant positive effect on profitability. The asset management variable was significant in model I and not significant in model II with a positive sign in both models. The size of bank has a non-significant negative influence for both models. Whilst the NPL ratio had a negative effect in both models, significant in model 1 and non-significant in model II.

Zeitun (2012) performed a study to assess the influential factors that affect the profitability of Islamic banks and conventional banks in GCC for the period 2002-2009. The independent variables included in the study are foreign ownership, bank-specific

variables and macroeconomic factors. The results showed a significant negative relationship between cost to income ratio and the performance of Islamic banks and conventional banks as well. Equity showed a significant positive effect on the performance of conventional banks only. Additionally, the size effect provided evidence of economies of scale in Islamic banking on ROE, while it showed no significant impact on the performance of conventional banks. Moreover, foreign ownership showed no effect on the performance of both types of banks as well as banking development and age. Finally, with respect to the macroeconomic variables, GDP and inflation are found to be significantly correlated to both types of banks' profitability. GDP is positively correlated to profitability while, inflation is negatively correlated to profitability.

Kanwal and Nadeem (2013) performed a research to investigate the impact of macroeconomic variables on the profitability of public limited commercial banks in Pakistan for the period 2001-2011. They used Pooled Ordinary Least Square method to examine the effect of three major external macroeconomic variables on performance. The external variables constituted GDP, inflation rate and real interest rate while the dependent variable used to measure profitability are ROA, ROE and equity multiplier. Firstly, the empirical findings showed that GDP has an insignificant impact on ROA, ROE and EM. Secondly, the results indicated a strong positive relationship of real interest rate with ROA, ROE and EM. Finally, concerning the effect of inflation rate on profitability, the results showed a significant negative impact of inflation on the three profitability indicators.

In an attempt to study the determinants of Islamic banking profitability in Malaysia, Abduh and Idrees conducted a study in 2013 to investigate the impact of bank-specific as well as industry-specific and macroeconomic indicators on the performance of Islamic banks for the period 2006-2010. Using the regression analysis, the results showed that the bank size affected profitability positively and thus emphasizing the economies of scale. Moreover, the results indicated that financial market development, market concentration and inflation are major determinants of Islamic banks' profitability in Malaysia. Financial market development, equity market development and market concentration ratio exhibited a positive correlation with Islamic banks

profitability. Concerning the inflation rate, it was found to have a positive correlation with profitability which implies that the bank income increases more than its cost during the inflation time. They argued that, forecasting and predicting the inflation rate could help the bank in making decisions with regards to the rate of profit sharing, loan quantity and asset quality.

Mokni and Rachdi (2014) conducted a study to discover which type of banks is more profitable and the factors that affect the profitability of each type of banks. They did a comparison of the performance between the two different banking systems in the MENA region. Their sample consisted of 15 Islamic banks and 15 conventional banks covering the period from 2002-2009. They developed a model that integrated the macroeconomic, industry-specific and bank-specific determinants. The empirical analysis showed that the significance of the determinants of profitability varies between Islamic and conventional banks. Islamic banks' profitability was found to be significantly affected positively by liquidity while negatively affected by efficiency of expenditure management and the off-balance sheet activities. Concerning conventional banks, it was found that it is positively affected by the off-balance sheet activities and banking capital,

Othman and Mersni (2014) performed a research to study the earnings management practices of Islamic banks and conventional banks in the Middle East region. In this study, the authors examined the factors that may impact the use of discretion in reporting loan loss provisions by the managers of Islamic banks. Furthermore, they investigated the existence of differences in the use of discretionary loan loss provisions used to manipulate accounting earnings between Islamic and conventional banks. They used a panel data of 21 Islamic banks, 18 conventional banks with Islamic windows and 33 conventional banks from seven Middle East countries during a period from 2000-2008. The results showed that discretionary loan loss provision was used by Islamic banks for both earnings and capital management. Moreover, the results showed no significant results between Islamic banks and conventional banks with Islamic windows and conventional banks in using discretionary loan loss provision.

In 2015, Chowdhury conducted a comparative study to analyze the determinants of profitability of Islamic banks operating in Malaysia for the period from 2007-2013. The



study was performed on 11 Islamic banks in Malaysia and it used the ROA as the performance indicator for profitability. The independent variables constituted bank specific determinants namely; Asset quality ratio, capital adequacy ratio, total overhead expenses divided by total assets and total loans to total assets. Also the independent variables included the macroeconomic factors specifically; GDP, inflation rate, money supply and national savings as a percentage of gross national income. The pooled ordinary least square method was employed to evaluate the financial performance of these Islamic banks. The empirical findings revealed that bank-specific factors namely the overhead costs is negatively and statistically significant to the profitability of Islamic banks. Equity financing showed a significant positive correlation to profitability. Concerning the macroeconomic variables, inflation showed a significant positive effect on ROA whereas savings on gross national income has a statistically significant negative impact on the Islamic banks' performance.

Hadriche (2015) performed a study to compare the determinants of the performance for Islamic banks and conventional banks operating in GCC countries covering a period from 2005-2012. The researcher based the study on a sample of 71 conventional banks and 46 Islamic banks using CAMEL rating. The results showed that Islamic banks are on average more profitable than conventional banks. Furthermore, concerning the determinants of performance, the regression's results indicated that there are some differences in regards to the variables affecting the performance of Islamic banks and the performance of conventional banks. Credit risk was found to be negatively affecting the performance of conventional banks but not significant in case of Islamic banks. Size and operational cost affected significantly the performance of both types of banks. Concerning the macroeconomic variables, it was found that inflation has a significant positive effect on the performance of Islamic banks only and no effect of any macroeconomic variable on conventional banks' performance.

ALTaleb and ALKhatib (2015) conducted a study to examine the determinants of Islamic banks operations in Jordan during the period 2000-2013. They used the earnings per share as a measure of operations representing the dependent variable. On the other hand, they used the economic and financial variables as the independent variables in the study. The study was applied on two Islamic banks in Jordan which are the Jordan

Islamic bank and the international Islamic Arab bank. The economic variables consisted of GDP, GNI, inflation rate and unemployment rate while the financial factors included the book value per share, the ROA, ROE, liquidity ratio and debt ratio. The study concluded that there is a negative relationship between EPS and GNI at 0.1significance level. Moreover, a significant positive influence was demonstrated between BVP and ROE on EPS. However, the results shown many insignificant relationships between EPS and unemployment rate, ROA, debt ratio, liquidity ratio, GDP and inflation rate.

Another study was performed by Samhan and Al-Khatib in Jordan in 2015. The aim of this study is to measure the determinants of financial performance of Jordan Islamic bank over the period 2000-2012. The dependant variable designating the financial performance was measured by ROA, ROE and Return on unrestricted Investment Accounts (ROULA); while the independent variables used in the study were divided into two categories which are the macroeconomic variables constituted of inflation rate, GDP and unemployment rate and the bank-specific variables consisted of total income divided by total assets, equity ratio, debt ratio, bank size and liquidity ratio. Concerning the first model, a significant positive relationship was found between ROA and inflation, equity ratio and bank size. On the other hand, a significant negative influence was found between ROA and unemployment rate. All the other variables proved to be insignificant in the first model. Secondly, concerning the second model using the ROE as the dependent variable, a significant positive effect of inflation and bank size was found over ROE. On the other hand, unemployment rate was found to have a significant negative effect on ROE. Concerning the last model using the ROULA as the dependent variable, a significant positive effect of GDP and a significant negative effect of unemployment rate were found over ROULA.

An interesting study in 2015 was performed in UAE by El-Massah and Al-Sayed to compare the Islamic and conventional banking sectors performance over the period 2008-2014. The study employed the financial ratio analysis to discover which of the banking systems performs better than the other. The sample of the study consisted of 11 conventional banks and 5 Islamic banks. The findings of the study indicated that there is a dominance of conventional banks over Islamic banks in profitability, credit risk and solvency. Another study was performed in UAE to compare the performance of

conventional and Islamic banks by Ibrahim (2015) covering the period from 2002-2006. However, in this study, the researcher made a comparison between one Islamic bank which is Dubai Islamic Bank and one conventional bank which is the Bank of Sharjah. The results of the study indicated that both banks' performance are reasonably well over the period of the study. On one hand, Dubai Islamic Bank was better off in terms of overall stability, while on the other hand, the conventional bank showed superiority in terms of liquidity, profitability, management capacity and capital structure.

After the abovementioned presentation concerning the previous studies on Islamic banking, it can be concluded that few studies investigated the performance of the Islamic financial system in Egypt. One of the most important studies was that of Kazarian in 1993. He argued that, it is crucial to compare the impact of both systems – traditional banking system and risk-sharing banking system – on the savings-investment process in a non-Islamic financial surrounding. The study is concerned with the role of private Islamic banks in the process of economic growth and development. Consequently, the study is divided into two main parts: theoretical part and empirical part. In the theoretical part of the study, the framework of Islamic banking is illustrated from a conceptual perspective. The empirical part of the study begins in 1979, the year in which the first private Islamic bank was set up, and it examines the performance of two private Islamic banks in Egypt which have been in operation for a period of ten years by the time the study is conducted. These banks are the Faisal Islamic Bank of Egypt (FIBE) and the Islamic International Bank for Investment and Development (IBID).

In addition to Islamic banks, the empirical part of the study covers the experiences of Islamic branches established by traditional banks and the activities of Islamic informal financial institutions (IIFI). The author investigated the performance of the Islamic financial system in Egypt from a macroeconomic perspective. He monitored the growth rate of deposits in the Islamic and traditional financial system and their abilities to mobilize their savings. From the asset side, he investigated the allocation of funds between the different sectors of the economy to find out whether the Islamic banks are performing their socio-economic role or not in comparison to the traditional secular system. Another study which adopted the same path of analysis was done by Mohieldin

in 1997. Both studies were interested with the macroeconomic effect of the Islamic financial system on the Egyptian economy.

The period of the two studies was characterized by special features that shaped the Egyptian economy during this period and, in turn, affected the banking performance and the results of the studies as well. Moreover, both studies did not tackle the subject of determining the performance of Islamic banks or the asset and liability management and treasury management in the Islamic banks or the differences that exist between the two types of banking systems. Also, The different risk factors that face the Islamic banks in the Egyptian market was not analyzed in any research previously; taking into consideration the special nature of the Egyptian economy as was mentioned in the Egyptian profile previously.

Another theoretical study was performed by Mouawad (2009) to analyze the political and economic problems faced by Islamic finance in Egypt. The researcher finds that the case of Egypt is a peculiar example because the government policies determine the performance of the Islamic financial sector. The study analyzed the policies of the Egyptian government towards the Islamic financial institutions since its inception in 1963 until 2007. The paper concludes that the Islamic financial institutions constitute a humble share of the Egyptian economy. The author explains this retrograde position by the governmental policies and their consistent manipulation over any economic and financial institution in a way that prevents the progress of the Islamic banking sector.

However a more recent study was conducted in 2013 by Fayed to compare the performance of Islamic banks with conventional banks in Egypt. The sample of the study consisted of three Islamic banks and six conventional banks operating in Egypt over the period from 2008-2010. The results of this study showed that the performance of conventional banks was much better than that of the Islamic banks. The research concluded that the application of Islamic banking in Egypt is facing many challenges that affected its performance negatively such as the existing gap between the theoretical base and the actual operations of Islamic banks and moreover, the lack of government support for Islamic banking in terms of regulations, lack of auditing and accounting standards, conflict with the central bank and many other factors that collectively negatively affect the Islamic banking sector in Egypt.

Lastly, it can be concluded that the field of Islamic banking in Egypt is still immature and in its very early beginnings. More studies are needed in order to be able to gain a more comprehensive understanding of the contemporary practices of Islamic financial institutions in Egypt nowadays.

### **3.8 The Importance of Studying Islamic Banking in Egypt**

Throughout the eighties, banks were highly liquid. Time and foreign currency deposits increased from nearly L.E.3.6 billion to nearly L.E.34 billion between 1980 and 1988, or at an annual rate of 32.4 percent. Part of the increase came from the revaluation of foreign currency deposits against the depreciating pound. The largest shares of the increase were those of time deposits and foreign currency. It was difficult to determine the savings rate, because the Central Bank did not separate time deposits from foreign currency. Some estimates showed that Egypt had a savings rate of 17 percent of GNP, one of the highest in the world. This was mostly private savings; public savings fell considerably in the 1970s and 1980s because of military expenditures, the high cost of subsidies, and the growth of foreign debt. The generally good performance of the banking sector was marred by corruption, embezzlement, smuggling of hard currency abroad, and a stormy confrontation between the government and the Islamic investment companies. In one case in 1984, a black marketer was able, through bribery, to obtain loans worth US\$3 billion and then to smuggle the funds abroad. It was estimated that in 1981 about 54 percent of hard currency deposits in private banks were placed with overseas branches or corresponding banks (Library of Congress, 1990).

Furthermore, at the religious level, Sheikh Tantawi, Mufti of Egypt, an interpreter or expounder of Islamic law Shariah, said that saving certificates are not form of Riba and that the interest paid by the conventional banks on deposits should be regarded as profit, rather than usury or Riba. The importance of this religious opinion is that it came from the Mufti who is a very impressive and affecting person for the Muslims in Egypt and a high percentage of the Egyptians follow the instructions of the Mufti in all aspects of their lives. Consequently, dealing with conventional banks became lawful from an Islamic perspective for those who accepted this fatwa (religious opinion). This fatwa

was in 1989 i.e. at the last year of the study and its effect would never have been remarkable over the results.

The establishment of the Islamic financial system pushed the government of Muslim countries to reform their legal and economic system in such a way to conform their financial institutions to the Islamic financial principles. While some countries have entirely Islamized their financial systems and removed interest rates like Pakistan, Iran and Sudan, the largest number have established Islamic financial institutions alongside conventional interest-based ones (Zaher and Hassan, 2001). Egypt is among those countries that adopted the second policy as it neither supported nor opposed Islamic banks to operate within its financial system. In fact, Egypt is among those countries where no laws have been enacted to govern the Islamic finance institutions. They operate under the same laws governing conventional banks (Hawary, et al., 2006).

According to the banker Mustapha (2007), Egypt with its total \$3.85m assets is ranked at the last position among the top 15 Islamic banks compared with Saudi Arabia (\$69.37m) and UAE (\$35.37m). However, it can be argued that it is expected that the performance of Islamic banks in Egypt are far below that of conventional banks due to the old age extensive network of branches and the experienced staff of conventional banks compared to the Islamic banks who are new comers to the Egyptian market. The same argument was presented by El-Saadani (2006), she said that the Shariah-compliant banking is still a novelty in the Egyptian economy. This is partly due to the fatal collapse of the Islamic Investment Companies (IICs) in the 80s which totally broke the trust of Egyptians in any Islamic bank. As El-Gamal (2006) argued official and public perceptions of Islamic banking in Egypt were severely damaged in the aftermath of massive failures of Islamist “fund mobilization companies” that apparently attracted remittances of many Egyptians working in the gulf countries.

Also, it was argued that demand for Islamic finance is still limited because, in a society like Egypt with high corruption level, Musharakah contracts, for example, requires a society that has a conscience and sense to responsibility to pay back what was borrowed (El-Saadani, 2006).

In Egypt, Islamic banking is on the decline since the first merger took place between an Islamic bank (the Islamic International Bank for Investment and Development) and two conventional banks (the United Bank of Egypt and the Nile Bank). Together they constitute one financial structure working conventionally under the United Bank, of which 99.9 per cent is owned by the Central Bank of Egypt. The reason behind the merge, as was mentioned before, was to protect the rights of depositors by not announcing bankruptcy. However, the government could have acquired the bank without merging with conventional banks in order to preserve the identity of the Islamic institution in the same way that Dubai's government dealt with the Dubai Islamic Bank crisis. Consequently, there are only two Islamic banks in Egypt: Faisal Islamic Bank of Egypt and the Egyptian Saudi Finance Bank, in addition to some of the Islamic outlets of conventional banks. They have no real market among themselves to place short-term funds, pushing up the cost of financing (Al-Nasser, 2008).

The banker Pacinthe Fahmy, a consultant at Egyptian-Saudi Finance Bank, in 2007 argued that Islamic banks in Egypt may exercise losses because the cost of finance is too high due to the high level of liquidity.

However, the Egyptian government policies were sharply apparent to be totally against the development of Islamic financial institutions (Mouawad, 2009). The attitude of the Egyptian government towards the Islamic financial system was very apparent as the development process of Islamic banking in Egypt reflected how the government policies have been politicized. According to Warde (2000), such politicization refers to the Egyptian government mix between Islamic finance and political Islam. The Egyptian government believes that the Islamic financial institutions are channels to finance the political Islamite movements which in turn threatens the government power and political stability in case of their rise. The Egyptian government withheld any encouragement of Islamic banking as it fears that some Muslim fundamentalist groups might use it to defend their religious causes especially after the assassination of President Sadat in 1981 by the Islamite brotherhood move (Albalawi, 2006).

Also, it was believed that any expansion of Islamic finance will lead to a destabilization of the existing economic system which contradicts totally with the Islamic finance principles especially the issue of interest prohibition (Moawad, 2009). Such an attitude

was reflected in the suppression of the first experiment of Mit Ghamr Bank which led to its closure due to the political and economic fears. Such approach adopted by the Egyptian government was also reflected in the experience of Nasser Social Bank which was diverted from its Islamic nature to act as a tool in the government's social programs (Mohieldin, 1997). All these reasons combined may justify why the Egyptian government has become more cautious about using Islam as a symbol in state affairs and this may be considered one of the reasons why the growth of Islamic banking and finance in Egypt has been so slow.

Although this stage was followed by government's acceptance of the establishment of some private Islamic banks, however, this movement stemmed from the government's commercial tendency to attract Arab investments rather than from the belief in the idea of Islamic finance itself (Moawad, 2009). Afterwards came the experience of the Islamic Investment Companies whom many of their founders started their activities as foreign exchange black marketers. The government was ignoring those companies because they were used to lubricate wheels of trade and dollar (Warde, 2000) and they were perceived as promoters of foreign currency in the economy. Those companies had plenty of cash and found themselves surrounded by businessmen who could not finance imports through the formal channels due to the non-functioning capital market and the malfunctioning banking sector. Furthermore, the government itself sought the help of black market traders in order to finance the imports of some essential goods (Mohieldin, 1997).

Afterwards, the government changed its attitude totally towards those companies and aided into their collapse by enacting the law of 1988 which was in part due to a response to the external pressure imposed by the IMF and in other part was due to the deterioration in the level of savings in public banks. However, it is worth mentioning that the government didn't intervene quickly enough and this delay in intervention was due partly to the fear of accusation of being anti-Islamic and believing that a major run on those companies would endanger banks and government agencies that had been dealing with them. Furthermore, at that time the government didn't have an approximate figure of the number of these companies or their depositors (Mohieldin, 1997). The government at that time benefited from the disastrous repercussions of the



Islamic investment companies and used it as a tool to shake people's perception towards Islamic finance and to justify its preference in providing Islamic finance services by state-owned banks (El-din, 2005).

On the legal level, the constitution of Egypt contains an article 2 which declares Islam the official religion of the country and determines Islamic Shariah a principle source of Egyptian legislation. Since the Egyptian government was dominated by a secularist party, neither the government nor the courts did make any effort to change the laws to reflect the Islamic law. However, with the growing power of the Egyptian Islamist movement, the government was forced to amend the constitution in 1980 to give Islamic law a vital and essential role in the Egyptian society. The wording of article 2 was thus changed from "Islamic Shariah is a principle source of Egyptian legislation" to "Islamic Shariah is the principal source of Egyptian legislation (Albalawi, 2006). Though the modification in the law; the government never showed any tendency to prohibit interest in the banking system.

To ensure this fact, Nomani (2003) argued that the constitutional amendment did not mean that the Shariah had become positive law in Egypt, but only a guiding principle for future legislation and this is because of a suit before the supreme constitutional court, the most important court as regards the application of the Shariah, pleading against a lower court judgment obliging Al-Azhar (the top religious establishment and one of the oldest and most influential Islamic universities in the whole world) to pay a debt and the 4% interest on it according to the relevant article of the civil code. The court dismissed the case arguing that the Shari' a rulings cannot be applicable to the already existing legislation retroactively without creating confusion and instability for the commercial and judicial process.

Moreover, as part of government denying policy to Islamic finance, the central bank of Egypt, issued the new banking law of 88/2003, in which no article admitted the existence of Islamic banking in the economic system (Asharq Al-Awsat Newspaper, 2007). Accordingly, Islamic finance in Egypt lacks a legal body of laws that conforms to its Islamic base.

Along with the government policies, the central bank of Egypt constrains the performance of Islamic banks by the regulations of liquidity, reserve requirements and credit rates ceiling. In addition, there is some degree of opposition from the conventional banking system to the expansion of Islamic banks in Egypt for fear that labeling any bank as Islamic refers implicitly that the commercial conventional banks are not Islamic and this, consequently, would lead to the loss of the credibility of these conventional commercial institutions (business today, 2006).

At the religious level, the situation got worse by a public fatwa issued in September 1989, by Sheikh Tantawi, Mufti of Egypt, an interpreter or expounder of Islamic law Shariah, asserting, unlike what he had said before, that saving certificates are not form of Riba and that the interest paid by the conventional banks on deposits should be regarded as profit, rather than usury or Riba. Consequently dealing with conventional banks became lawful from an Islamic perspective for those who accepted this fatwa. He stated that the saving certificates are a modern transaction which are beneficial to individuals the whole society alike, and do not lead to exploitation of one party by the other (Nomani, 2003). Despite strong opposition to this opinion from the majority of Muslim scholars, Islamic banks lost further depositors who followed the opinion of the Mufti. As a consequence, the Central bank of Egypt, encouraged by this Fatwa, allowed banks to raise interest rates to encourage savings in the local currency and attract funds to the conventional banking system.

Surprisingly, in 2002, when Dr. Tantawi became the Grand Imam (holder of this position is the head of the Muslim community and is perceived as the most influential religious member in Islamic world), he stressed on his Fatwa and declared that “investing funds with banks that pre-specify profits or returns is permissible (El-Gamal, 2003). Although the recent fatwa did not permit all bank interest and it permitted only certain types of bank interest as investment profits, it was an opportunity for the government to shape the public perception in accordance to its line of policy, taking advantage of the deep impact of religion on the people’s attitudes and perception.

Furthermore, many problems exit nowadays regarding the practices of Islamic banking in the Egyptian economy. An essential problem exists concerning the practicing of Islamic banking concept in general which is the differing interpretation of Riba. This

means that some Islamic banks may offer products and services that other Islamic banks find unacceptable. Unfortunately, the annual reports that different Islamic banks publish do not provide a detailed discussion regarding how Riba is defined in each bank (Olson and Zoubi, 2008).

### **3.9 Conclusion**

This chapter was devoted to give a comprehensive reference about performance measurement in general and banks' performance measurement in specific. Also, this chapter presented a comparison between the financial and non-financial measures of performance. Based on this comparison, the researcher made the decision to conduct the study using financial tools as it will yield more concrete and objective results that can be used in comparison between Islamic and conventional banks and to draw a conclusion concerning the performance of the Egyptian banking system. In addition, the main goal of this chapter is to give a complete presentation about the empirical studies performed on Islamic and conventional banks. Moreover, this chapter presented a summary about the importance of making this study in Egypt and why Egypt is considered an exceptional context for the research. Egypt is considered a unique case for studying the Islamic banking system. Since the inception of the first Islamic bank in 1963, and this form of finance didn't meet any welcome or support from the government. The Islamic banking system in Egypt is always struggling to compete in the same market with conventional banks. This makes this research an important step to answer many questions concerning the current situations of the Islamic banking system in Egypt.

## **Chapter Four**

### **Theoretical Background**

#### **4.1 Introduction**

The aim of this chapter is to conduct a comprehensive review of the theoretical background related to the determinants of performance in banks. In order to reach this objective, this chapter presents an investigation of the major financial and accounting theories used to explain the performance and profitability of financial intermediaries. Afterwards, the chapter gives a complete overview of the literature related to the contingency theory. It explores the suitability of this theory to explain the variables related to the performance measurement of the banking system in Egypt. Moreover, it gives a summary for the evolution of the management theories in general and the contingency theory in specific and it presents a review of the literature of contingency theory with a complete criticism of this theory.

#### **4.2 Financial Performance Theories**

The theoretical framework introduces and describes the theory which explains why the research problem under study exists. It consists of concepts, together with their definitions and existing theory/theories that are used for the particular study (Sekaran, 2005). A theory is useful in explaining, evaluating and predicting the phenomena associated with a given field of thought like in case of accountancy. The development of accounting theory was to ameliorate the inherent problems encountered in barter economy, like measurement inequality, complication in terms of production variety and coupled with the problem of coincidence of wants; unlike monetary economy (Unegbu, 2014).

Many theories were used to explain the behavior of organizations and financial performance. One of these theories is the market power theory which assumes that the performance of an organization is influenced by the market structure of the industry. There are two distinct approaches within the market power theory, the Structure Conduct Performance approach and the Relative Market Power approach. According to the Structure Conduct Performance, the level of concentration in the banking market

gives rise to potential market power by banks, which may raise their financial performance. Banks in more concentrated markets are most likely to make “abnormal profits” by their ability to lower deposits rates and to charge higher loan rates as a results of collusive (explicit or tacit) or monopolistic reasons, than firms operating in less concentrated markets, irrespective of their efficiency (Tregenna, 2009). Unlike the Structure Conduct Performance, the Relative Market Power hypothesis posits that bank financial performance is influenced by market share. It assumes that only large banks with differentiated products can influence prices and increase profits. They are able to exercise market power and earn non-competitive profits (Tregenna, 2009). It is clear that the market power theory considers only on one variable in measuring profitability which is the market structure represented by the level of concentration or the market share. This variable is mainly concerned with the market as an external factor affecting the profitability of banks regardless of other factors that are needed to be taken into consideration.

An alternative hypothesis is the efficiency-structure hypothesis that emerges from criticism of the Structure Conduct Performance hypothesis (Athanasoglou et al, 2006). The efficiency hypothesis postulates that the relationship between market structure and performance of any firm is defined by the efficiency of the firm. Firms with superior management or production technologies have lower costs and therefore higher profits. There are also two distinct approaches within the efficiency-structure hypothesis; the X-efficiency and Scale–efficiency hypothesis (Athanasoglou et al, 2006). According to the X-efficiency approach, more efficient firms are more profitable because of their lower costs. Such firms tend to gain larger market shares, which may manifest in higher levels on market concentration, but without any causal relationship from concentration to profitability (Athanasoglou et al, 2006). The scale approach emphasizes economies of scale rather than differences in management or production technology. Larger firms can obtain lower unit cost and higher profits through economies of scale. This enables large firms to acquire market shares, which may manifest in higher concentration and then profitability (Athanasoglou et al, 2006). This hypothesis is mainly concerned with the internal efficiency inside organizations and their consequent effect on the market share and profitability. This is only one part of the internal factors that affect the performance of banks. Still, this theory is not a comprehensive one to be used in this research.

Another important theory is the portfolio theory approach which plays an important role in bank performance studies (Nzongang & Atemnkeng, 2011). According to the Portfolio balance model of asset diversification, the optimum holding of each asset in a wealth holder's portfolio is a function of policy decisions determined by a number of factors such as the vector of rates of return on all assets held in the portfolio, a vector of risks associated with the ownership of each financial assets and the size of the portfolio. It implies portfolio diversification and the desired portfolio composition of commercial banks are results of decisions taken by the bank management. Moreover, the ability to obtain maximum profits depends on the feasible set of assets and liabilities determined by the management and the unit costs incurred by the bank for producing each component of assets (Nzongang & Atemnkeng, 2011). The pivot in this approach is related to the performance of the companies in the stock market and the effect of policymakers' decisions on the rates of return of the company. This approach is far from the concern of this research as the researcher chose not to focus on the stock market performance because the Egyptian stock exchange is an immature market and the data may jeopardize the consistency of the results.

Garoui et al (2013) argued that the signal theory can be used to explain the performance of banks. The signal hypothesis was developed by Berger in 1995. According to this theory, the use of equity to finance a project (which is more expensive than debt) sends a strong positive signal to the market that the bank is very confident in its projects and consequently their profitability level will increase. Bank's management signals private information that future prospects are good by increasing capital. Thus, a lower leverage indicates that banks perform better than their competitors who cannot raise their equity without further deteriorating the profitability. Thus, the equity ratio is a strong determinant of banks' performance (Ommeren, 2011). On the other hand, bankruptcy hypothesis argues that in a case where bankruptcy costs are unexpectedly high, a bank holds more equity to avoid period of distress (Berger, 1995). As the literature review pointed out, the signaling hypothesis and bankruptcy cost hypothesis support a positive relationship between capital and profitability. However, the risk-return hypothesis suggests that increasing risks, by increasing leverage of the firm, leads to higher expected returns. Therefore, if a bank expects increased returns (profitability) and takes up more risks, by increasing leverage, the equity to asset ratio (represented by capital)

will be reduced. Thus, risk-return hypothesis predicts a negative relationship between capital and profitability (Obamuyi, 2013; Sharma and Gounder, 2012; Ommeren, 2011; Saona, 2011; Dietrich and Wanzenrid, 2009). The signaling hypothesis along with the bankruptcy cost hypothesis are centered around the equity ratios and their effect on returns and profitability disregarding many other factors that could be incorporated into the analysis and may influence the performance as well.

The signaling theory combined with the theory of balanced markets may be used in conjunction to explain the determinants of banks' performance. The theory of balanced markets predicts a strong relationship between risk and profitability. The bank which manages well their credit risk will consequently be more careful in risk management, yet they will have a lower profitability. Therefore, the most high-performing banks are those which manage to maintain a low risk index (Garoui et al, 2013). In this theory, risk is used to test for its effect on profitability in isolation of many other variables that are to be considered essential when studying the performance of financial institutions.

Another important argument is based on the theory of Conventional Economic efficiency. It was argued that size promotes efficiency by reducing possible costs of gathering and processing information (Said, 2012; QFinance, 2010; Bashir, 1999). Large banks are capable to mobilize more funds in generating high returns for its depositors and equity holders due to its diversification, which is achieved from having more resources. By these resources, larger banks are able to finance large numbers of profitable investment opportunities and acquire better access to investment activities.

Major studies found a positive relationship between bank size and efficiency (Siddiqui & Shoaib, 2011; Srairi, 2010; Delis & Papanikolaou, 2009; Rossi, Schwaiger & Winkler, 2005; Hassan, 2005; Yudistira, 2004). As a general rule, larger firms tend to have higher level of profitability and efficiency. Size is one of the major important determinants of profitability in banks; yet, many other variables need to be integrated into the analysis in order to get a comprehensive picture about the profitability determinants in banks.

Moreover, to investigate the relationship between ownership structure and banks' profitability the agency theory of Jensen and Meckling (1976) was used. Their

hypothesis suggests that profitability is influenced by the ownership structure. It assumes that shareholder owned banks are more profitable than mutual, co-operative and state-owned banks (Van Ommeren, 2011). Their research explains why managers of entities with different capital structures, choose different activities. In a relationship between owners and managers, a principal-agent relationship, both differs in needs and preferences. In this context, an obvious theoretical argument for the relationship between the ownership structure and profitability arise: capital market discipline could strengthen owner's control over management, giving banks' management more incentives to be efficient and profitable. The agency problem is more concerned with the dissimilar incentives of borrowers and savers, in a broader context it refers to the dissimilar incentives of principles and agents (Jensen and Meckling, 1976).

In a case of financial distress, borrowers are limited liable; implying that they have incentives to alter their behavior by taking on more risk than savers are willing to accept. Monitoring the borrowers' behavior is time consuming, complex and expensive for individuals. In inefficient markets, financial intermediation is beneficial since banks have lower monitoring and transaction costs than individuals, due to economies of scale and scope.

Another important strand of research which is the Financial Intermediation Theory focuses on the role of banks in an environment where market participants are asymmetrically informed. The presence of asymmetric information (adverse selection) increases transaction costs and require the existence of institutions to keep a check on the behavior of investors. A major rational for the existence of financial intermediaries is their superior ability to specialize in assessing the credit risks of potential borrowers. By specializing in gathering information about loan projects, and by permitting pooling and risk sharing among depositors, banks help reduce market imperfections and improve the allocation of resources. More important, the financial intermediation theory predicts efficiency gains related to size (Bashir, 1999).

As it is clear from the above discussion, no general theory of performance provides a unifying framework for this study and integrated the variables of the study into one model. Each theory from the above mentioned ones focused on only one side and disregarded many other factors that needed to be incorporated into the research model.



That is why the researcher chose the contingency theory to be the theoretical framework for this research as it incorporates all the research variables into one model in such a way to make it more clear and simple to test the effect of those variables in affecting the profitability of banks. Moreover, having all the variables included in one research model will make it better and clear for the research to make the comparison between the determinants of profitability of Islamic and conventional banks.

### **4.3 The Evolution of the Management Theories**

Theories are perspectives with which people make sense of their world experiences (Stoner et al., 1995). Many opinions argue that the management theory developed during and after the Second World War pioneered by the seminal work of Taylor's scientific management theory, Gilbreth's motion study, Weber's bureaucratic theory and Fayol's administrative theory. Up until the late 50s, the classical management school dominated the academic writing about organizational structure. Those theories such as theory X and the classical management theory were characterized by being authoritative and mechanistic in nature. This approach basically is dependent on the belief that there was a single organizational structure that was highly effective in all organizations. This structure is characterized by a high degree of decision making and planning at the top level of management (Clegg and Hardy, 2006).

Taylor started the era of modern management. He was strongly influenced by his social/historical period (1856-1917) during the Industrial Revolution. This period was characterized by being autocratic in nature and saw the turning to science by Taylor as a solution to the inefficiencies and injustices of the period (Olum, 2004).

Roethlisberger and Dickson (1939) argued that by the beginning of the 30s, the classical management school was constantly challenged by the human relations approach. This new approach guided by theory Y was characterized by being humanistic and democratic in nature. It focused on the individual employee and his psychology and social needs (Clegg and Hardy, 1999). The key researcher in this school is Elton Mayo (1933). He found that work satisfaction depended to a large extent on the informal social pattern of the work group. He concluded that performance is dependent on both social issues and job content. Also, within this context, the work of March and Simon

(1958), Newell and Simon (1972) and Barnard (1938); they all argued that the study of the organization and the organizational decision making process should be viewed in terms of some social and psychological factors that are considered significant in the design of the production processes (Strati, 1997).

#### **4.4 The Contingency Theory Background**

During the 60s, there was a start of a great deal of empirical work that began to examine the ways in which the structure of the organizations tend to be different according to the markets and the environments where the organization operates. It is assumed that organizations are to be built in such a way that allows them to respond to external problems by monitoring the goals and the operating procedures in the organization. The basic idea is that organizations are built according to the contingencies of their technology and environment (Fligstein, 2001).

Contingency approaches are positioned within management between two extreme theories which are the universal approach and the situation specific approach. The contingency approach has its roots in the general systems theory and the open systems perspective which depends on the importance of the organization-environment relationship (Luthans and Stewart, 1977).

The pioneering work of Burns and Stalker (1961) led to the construction of the contingency theory. They proposed the existence of a contingent relationship between formal organizational structure and its performance. They made a distinction between “mechanistic” and ‘organic’ forms of organization and management. They argued that the idea of an organization being mechanistic or organic depends to a large extent on the rate of environmental change such as technological uncertainty. They mentioned that in a dynamic environment, formalization decreases organizational adaptability to environmental changes and hence the risk of organizational failure rises. They stated that the mechanistic management system is more appropriate to stable conditions. The functional tasks are broken down into individual tasks which are pursued with techniques in such a way that are different than those of the tasks of the organization as a whole. On the other hand, the organic form is appropriate to dynamic and changing conditions. It is characterized by a realistic nature of the individual task which is

constantly adjusted and redefined based on changing environment. Also, the chain of communication in the organic management depends on the information, advice and consultation rather than the direct instructions, commands and decisions by superiors like in the mechanistic management style.

Woodward et al., (1965) explored the link between technical complexity and a company's organizational strategies. She made a comparative study to examine the structures of one hundred companies working in different industries. Through the qualitative and quantitative study of different aspects of the organization, she concluded that there is an association between technology and the organizational strategies. She mentioned that as companies use more advanced technology, higher level of automation and capital investment, their production processes become smoother and more continuous and consequently achieving better performance. The major weakness in Woodward's study according to Donaldson (1995) is her assumption that technology influences the overall structure of the organization. He argued that technology affects the individual job rather than the overall organizational structure.

Lawrence and Lorsch (1967) produced a theory that is very much related to the one of Burns and Stalker, yet more complicated. They carried a comparative study in the plastic industry followed by two other firms. They wanted to explore what type of organization is necessary to cope with various market conditions. They argued that the organizational structure is related to the degree of differentiation and integration of the organizational subunits. Like Burns and Stalker, they concluded that the structure of the organization depends on its environment. It is worth noting that; Lawrence and Lorsch were critical about some aspects of their research and have referred to it as being crude. Researchers frequently used their contingent variable which has become later established as a core contingency factor (Otley, 1980; Child, 1975; Duncan, 1972).

Consistent with the past studies was the one made by Khandwalla (1973). He argued that for a firm to be effectively designed, it must be designed on all three sets of variable (uncertainty reduction, differentiation and integration). He concluded that there may be several rather than one effective design and whether this specific design is appropriate or not depends upon the environmental context in which the organization operates.

Donaldson (2001) mentioned that the contingency theory of organizations is a major theoretical lens used to view organizations and it is considered very important in the history of organizational science. He concluded that organizational effectiveness results from fitting organizational characteristics such as size or structure to contingencies that reflect the conditions of the organization. Those contingency factors include the environment (Lawrence and Lorsch, 1967; Burns and Stalker, 1961), size of the organization (Child, 1975; Pugh et al., 1968, 1969; Hickson et al. 1969), technology (Perrow, 1967 and Woodward et al., 1965) and organizational strategy (Child, 1972; Chandler, 1962). Consequently, organizations become shaped by those contingencies in order to fit them and avoid performance deterioration (Drazin and Van de Ven, 1985; Woodward, 1965; Burns and Stalker, 1961).

By the beginnings of the 70s, the contingency theory became well established as the dominant and most prevailing approach in organization theory (Child, 1984). It was considered as a move away from the Universalist theories which advocated the idea that there was only one way to organize and consequently to achieve the highest level of performance and any other structure will lead to a loss in performance (Luthans and Stewart, 1977).

Environment, technology and size were the primary contingent factors. Additional contingency variables are added by researchers while others just divided the primary factors.

Drazin and Van de Ven (1985) argued that the main difference among the contingency theory and other theories is in the specific form of the propositions. Fry and Schellenberg (1984) drew a difference between congruent and contingent propositions. In the congruent proposition, a simple unconditional relationship is assumed among variables, while in the contingent proposition, the relationship is more complex as there exists a conditional relationship between two or more independent variables and a dependent variable subject to an empirical test.

Drazin and Van de Ven (1985) argued that many early contingency theories were in fact congruence theories because they simply hypothesized that the organizational contingencies (e.g. Environment, technology or size) was related to the organizational

structure without studying whether this relationship affected performance or not (Hage and Aiken, 1969; Perrow, 1967).

While the contingency theory developed by Burns and Stalker (1961) holds that the organizations working in a stable environment require a centralized organizational structure and those working in a dynamic environment require a decentralized structure, the study made by Negandhi and Reimann (1972) suggested a slightly modified version of the contingency theory to fit in the context of a developing country. Since their study was applied on India, they concluded that the dynamic, competitive market conditions make decentralization more important to organizational effectiveness than does stable non-competitive conditions.

A general contingency theory of management was formulated by Luthans and Stewart (1977). They argued that the optimum organizational structure depends on a number of contingent factors and functional relationships between the environmental, managerial and performance factors such as the complexity of the environment, the strategic positioning of the firm, or the technology used. They created a three-level system paradigm. The primary system variables include the environmental variables, the resource variables and the managerial variables. The secondary system variables result from the intersection of the primary system variables. They are the situational variables which are defined by the intersection of environmental and resource variables. The organizational variables result from the intersection of managerial and resource variables. And finally; the performance criteria variables, which is determined by the intersection of the environmental and management variable sets. The tertiary level is generated from the interaction of secondary system variables resulting in a set of performance variables which represent the actual performance output of the organization.

The structural contingency theory is often considered as being an equilibrium theory to a great extent, which means that organizations are depicted as attaining fit and consequently reaching equilibrium thus remaining static. However, the theoretical model of structural adaptation to regain fit (SARFIT) by Donaldson states that the SARFIT is a disequilibrium theory as an organization only remains in fit temporarily until it achieves expansion and thus moves into misfit. This cycle repeats itself over

time. The movement between fit and misfit periods results in high and low performance respectively and produces incremental increase in structure and eventually leads to growth (Donaldson, 2001).

Contingency theorists argued that the optimum structure depends on a number of contingent factors and functional relationships between these environmental, managerial and performance factors. They stated that there is a middle ground in which it is possible to analyze the variation in organizational structures in a systematic way (Luthans and Stewart, 1977; Galbraith, 1973). Among these prominent contingent variables as stated by Ittner and Larcker (2001) and Fisher (1995) are the external environment (e.g. simple vs. complex; static vs. dynamic), technology (e.g. mass production, automation, production interdependencies), competitive strategy (e.g. low cost vs. innovation), business unit and industry characteristics (e.g. regulation, size, structure, diversification) and knowledge and observability factors (e.g. behavior observability, knowledge of the transformation process, outcome observability).

Donaldson (2001) stated that his view of organizations is positivist and functionalist in sociological terms. According to his positivist view, the contingency theory is a general theory of organizations, which hold across many different kinds of organizations and in many different settings. The theory is positivist in the sense that the methods used to test the theory include scientific methods such as quantitative techniques and controlling for external variables.

Also, material factors play a role like for example organizational size. In addition, he argued that his functionalistic view of organizations is essentially created because of their instrumental benefits; that is, tasks that can't be performed by individuals are easily done by organizations because the structure of the organizations is necessary to coordinate work of their members and allow tasks to be accomplished easily (Donaldson, 1987).

Reid and Smith (2000) stated that the contemporary contingency theory of management accounting has a particular aim of explaining how certain contingencies shape the form of management accounting system unlike the earliest studies of contingency theory which had broader aims of explaining the form of the organization itself. They argued

that Gordon and Miller (1976) made a notable transitional work which links the narrow concept of today with the broader concept of yesterday. The firm's management accounting system is regarded as being determined by its environment, its organizational form and by its decision making style. Their work suggests that the clustering of contingencies leads to the recognition of three types of firm: the adaptive, the running blind and the stagnant. The adaptive firm functions in a dynamic environment, which requires decision making to be dynamic and operates in a decentralized fashion. While the running blind type of firm, which also operates in a dynamic environment, but is managed more likely based on intuitive basis. It is characterized by a centralized organizational structure and its decision making process is entrepreneurial in character. The third type of firm which is the stagnant type operates in a stable environment and its decision making is conservative, involving little analysis with a strongly centralized organizational structure.

Hayes (1977) developed a model of organizational performance for internal subunits. He argued that a unit is influenced by different features of its environment. In his model, he discussed the way in which management accounting practices varied across organizational subunits. He concluded that the main determinants of management accounting system are three contingent variables that affect subunit performance. Those variables are: subunit interdependence (e.g. R&D intensity); dynamism of environment (e.g. marketing intensity) and factors internal to the subunit like work method specification (e.g. production intensity). He argued that different departments will relate differently to these variables because of different levels of organizational insulation they experience. His results suggested that the contingency approach can explain the different influences on a department.

Although Child (1972) and Woods (1979) criticized the contingency theory on the basis that they suffer from a number of conceptual and methodological problems, its value as a theory in explaining the relationship between an organization and its context has led them to suggest that the contingency theory may provide a more holistic approach to the design of management accounting systems. Therefore, Child made a research to study the effect of managerial and organizational factors on the company performance. His study is divided into two parts. The first part was in 1974, while the second one was in

1975. In part one, he argued that some managerial and organizational factors will affect performance positively regardless of the type of company and its operating circumstances. Yet, in the second part, he argued that achieving high performance is contingent upon the type of company and the prevailing circumstances and conditions. He also stated that the contingency theory identifies those factors and attributes that enable a company to cope better with its special operating circumstances. He also stated that the factors resulting to high performance tend to change with variations in the organization's context.

The results of his study didn't demonstrate a strong relationship between managerial and organizational variables and the company's performance. He added that this result may be due to some extent to inadequacies in the measurements used or in the choice of variables investigated in the research. Child stated another consideration similar to the one of Boswell (1973) which is that if a large number of factors are proved to be affecting performance at the same time, then no single factor is likely to have much effect on its own.

Another explanation for the lack of strong relationships with performance as mentioned by Child is that, managers are normally able to adopt new strategies aimed at changing the constraints imposed by the situation in which they find themselves in. consequently, this freedom of actions tends to reduce the degree to which contingency theories can account for large proportions of the variation in company performance.

One limitation to this study and of many other studies is that it does not tell much about the internal behavior of companies at policy-making levels (Woods, 1979; Child, 1972). More investigations are needed to question the direct causes of poor performance.

Contingency theories of management accounting have been subject to criticisms as contingency theories of organizational structure. These researchers argued that:

1. The question of the design of management accounting systems has not been addressed fully especially when faced with the conflicting results of contingent variables.
2. The operationalisation of contingent variables has been a problem.



3. Linkage between the contingencies and the organizational effectiveness are tentative but not conclusive.
4. The nature of appropriate contingent variables has not been properly explained.

Also Schoonhoven (1981) identified five weaknesses for the contingency theory application in management accounting which are:

1. Lack of clarity in theoretical statements which do not differentiate between contingent variables.
2. Lack of explicit recognition of the fact of interactive propositions that the contingency studies produced.
3. Lack of an explicit statement relating to the precise mathematical function of the implied interaction.
4. A tendency to rely on the general linear model and correlational procedures.
5. An implicit assumption that contingency relationships are symmetrical.

#### **4.5 Contingency Theory Criticism**

Fligstein (2001) argued that one of the main criticisms came from those who were trying to understand the effect and the nature of the environment more precisely. Those scholars mentioned that the competition and scarce resources factors are essential for organizational survival and consequently, they developed the resource dependency theory (Pfeffer and Salancik 1978), the population ecology theory by Thomas Malthus (Garcilazo, 2011) and the economic evolutionary theory (Veblen, 1898).

In Donaldson (1996), the contingency theory has been criticized as being static and consequently it is considered misleading as to social and organizational change (Rex, 2010). Also, major criticisms have been leveled at the contingency theories of organization structure (such as Lawrence and Lorsch, 1967; Woodward, 1965; Chandler, 1962; Burns and Stalker, 1961). The idea behind the argument was that the contingencies, like the organizational context (e.g. size or technology) or the environment (e.g. technological uncertainty) of the organization give rise to a set of pressures, to which the structure must adapt over the long term, has been challenged (Schreyogg, 1980).

Also, it had been argued that the longitudinal studies in the comparative, quantitative literature in which the changes in contingent and structural variables are measured, tends to conclude that there is lack of connection between some contingency factors and structure (Suzuki, 1980; Dewar and Hage, 1978; Inkson et al., 1970).

The contingency theory was criticized by Schreyogg (1980) for being deterministic. He stated that there is no choice among alternative structural arrangements within given situations. Also, he added that the organization has no possibility of influencing or controlling its environmental situation.

Also, Child criticized the contingency determinism as a simple type of correlation between contingencies and structure which suggests that a change in the contingency factor produces a change in the structural variable directly and almost immediately. He said that, though this theory is used in empirical studies, yet it is not realistic. He proposed the strategic choice model which states that misfit creates low performance, leading to a pressure for change to restore back the balance between structure and contingencies. However, in his strategic choice model, he argued that this balance can occur by two ways; either by adjustment of structure to fit the new contingency or by adjustment of the contingency to the structure (Donaldson, 1987). Nevertheless, Donaldson in his study (1987) rejected the strategic choice theory. The results of his analysis in several industrial countries suggested that the structural adjustment to regain fit is the more accurate theory of the causal relationship. He concluded that there are relatively few cases where adjustment to change happened by the modification of the contingency to fit the structure and not the opposite.

Donaldson (2001) claimed that there are two difficulties in the traditional contingency theory that encouraged the emergence of 'neo-contingency theory' which is a more realistic and dynamic version of the contingency theory. The first difficulty is that whenever there is a study of the effect of different contingent variables on some dependent variables, a question then arises of how to combine the effects of more than one variable to assess their total effects on the dependent variables. According to him, the second problem is related to how managers know exactly what/how organizational structures fit their contingencies. Contingency theory implicitly assumes that managers know the organization fit situation they should be in and this view is unrealistic.

Donaldson considered that the contingency theory is one of disequilibrium because the higher the performance enjoyed by organizations in fit the higher the surplus resources available to them. So, organizations tend to use these surplus resources to expand, thereby increasing the level of some of their contingency variables e.g., size, while keeping their existing structure, consequently organizations move into misfit of structure to contingency (Donaldson, 2001). He also criticized the structural contingency theory by arguing that it is not sensible for organizations to move into fit with their contingencies because while the organizations are changing to fit with their contingencies, the contingencies themselves change with time. This means that the organization will not be able to attain full fit, but quasi fit, that is, a structure that only partially fit the contingencies (Donaldson, 2001).

The general contingency theory of management formulated by Luthans and Stewart (1977) was criticized by Longenecker and Pringle (1978). They argued that the basic building blocks of the general contingency theory of management are an almost infinite set of ill-defined variables which are posited to interact to produce system performance. They added that theory formulation is not simply a listing and crude classifications of variables, but a statement of the form of the relationship among these variables. They argued that the term 'contingency' implies that the structures and practices of an organizational system depend on the way in which the environment becomes relevant to the system. While in the opposite situation where the system is working on the environment is not considered because the working division between the dependent and independent variables would be jeopardized and this is to be considered as a weak link in the contingency theory.

Fisher and Fisher (1998), Govindarajan (1993) and Gresov (1989), argued that an organization might design a control system to be consistent with one contingency factor and ignore the others and consequently this may result in lower business unit performance. Also, they added that, if several contingencies are included simultaneously into the analysis, they may conflict. This means that if several contingencies are addressed when designing the control system, a trade-off among contingencies will result and consequently a misfit will occur, making optimal control difficult. The presence of conflicting contingencies implies that the control system

design will deviate from the demands of at least one contingency making optimal control difficult. Fisher (1998) stated that the relationships among contingency variables are and need to be explored. He mentioned that many contingent factors may not be correlated and thus giving rise to the possibility of conflicting contingencies. Child (1975) added that designing control system in such a way to achieve internal consistency led to higher performance and any misfits in design result in lower performance.

The relative lack of concern about organizational effectiveness is another criticism pointed towards the contingency theory. According to Fisher (1995), when performance was included as a dependent variable, it was poorly defined. The basic cornerstone of contingency theory is that a proper fit will result in higher performance; yet, the measurement of performance is problematic. In fact, a debate is still ongoing about the nature of organizational goals. Some researchers believe that organizations do not have goals; others argue that organizational goals are just a reflection of individual goals, while others see goals as objective functions that are to be maximized (Merchant and Simons, 1986).

Otley (1980) mentioned that there tend to be a dependence placed on a relatively small number of variables which were used to explain the organization structure and the design of managerial accounting systems. He argued that these variables tended to be ill-defined and measured and were not comparable across earlier accounting studies thus yielding fragmented results. Otley concluded that there is a need to include accounting systems in the overall studies of organizational control approaches to develop more different expressions of organizational effectiveness and in order to be able to move to a more complex version of the contingency framework.

Even with the above strong criticism, the contingency theory still has lots of advocates which will be discussed in the following section.

## **4.6 Strengths of the Contingency Theory**

The contingency theory has intuitive appeal in understanding broad issues of management controls, yet, the extensive interaction of variables as well as the

continuous changes in organizations and its environment would make it difficult to adopt the contingency theory (Selto et al., 1995). They also added that; there are many reasons that justify the suitability of the contingency theory as a theoretical framework to study the performance measurement issue which are: 1) no other theory directly concerns fit; 2) despite criticism, the intuition behind the theory continues to be appealing; 3) several recent operationalizations of fit have overcome some previously mentioned criticisms (Selto et al., 1995).

Some of the major contingency theory advantages are summarized below:

1. Organizations are more and more being perceived as open systems rather than closed ones. They interact actively and constantly with their environment, consequently, the conditions of environmental uncertainties that affect the organizations' performance are of high importance to be measured and examined which is suggested by the contingency theory framework (Rayburn and Rayburn, 1991).
2. Covaleski and Dirsmith (1996) argued that the contingency theory has enabled managerial accounting researchers to choose the most suitable control systems to be used with the different types of organizations. The contingency theory suggests that the tight and rigid control systems should be used in centralized organizations working in stable environment with simple technology, while decentralized organizations working in dynamic uncertain environment with complex technology should use loose control systems. In other words, the contingency theory provides a more holistic approach to the design of management accounting systems (Rayburn and Rayburn, 1991).
3. Credit goes to the contingency theory of being able to cover up some of the ambiguities and contradictory findings that exist in the universalistic approach (Otley, 1980).
4. The contingency theory gained a great deal of appeal and acceptance as it is in accord with practical wisdom. Otley (1980) stated that the relevance of the contingency theory to management accounting is widely increasing. The development of the contingency framework and its interpretations depend on well defined variables which are used to explain how management control system is

affected by various contingencies and how it is integrated into a wider context of organizational control mechanisms.

5. The contingency theory emphasizes that contingencies must fit in such a way to achieve the optimal organizational performance. Therefore, it has the capacity of reorganizing and adjusting to new contingencies, regardless the type of the organization's structure and its surrounding environment (Child, 1975).
6. According to the contingency theory, there is no best organizational structure; the optimal organizational structure for a given situation depends on many variables like the external environment and the degree of task uncertainty. Hayes (1977) argued that different departments within an organization will react differently to these variables because of the different levels of organizational insulation they experience. His results suggested that contingency theory can explain the different influences on a department.

#### **4.7 Contingency Theory Framework**

The contingencies theories expanded the management planning and control framework by stating some of the contingent variables affecting the entire organization control spectrum of accounting and non-accounting information systems, organizational design and control mechanisms (e.g., Otley, 1980; Waterhouse and Tiessen, 1978; Hayes, 1977; Gordon and Miller, 1976).

These theories contended that there is no universally acceptable system of management accounting and control (Emmanuel et al., 1990). Rather, it is suggested that the choice of the suitable accounting and control techniques depends basically on the conditions and the circumstances surrounding and influencing the organization (Haldma and Laats, 2002). Among the prominent contingent factors in the literature are the external environment, technology, competitive strategy and mission, business unit and industry characteristics and knowledge and observability factors (Fisher, 1995).

Abdel Khalik and Ajinkya (1979) argued that the theoretical structure should give rise to the identification of the dependent and independent variables and suggest the forms of the relationships among them.

The contingency theory building steps involve three types of variables: the contingency variables, response variables and performance variables. The contingency variables represent situational characteristics usually exogenous to the organization. In most cases, there is no or minimal opportunity to control and manipulate these variables. The response variables are the organization and managerial internal variables. The performance variables are the dependent measures and they represent specific aspects of effectiveness that are appropriate to evaluate the firm's performance (Zeithaml, et al., 1988).

While the roots of contingency theory are in the management and organizational theory literature, application of the theory to accounting followed quite quickly. Hayes' (1977) work on organizational sub-unit performance assessment, represents one of the early efforts at applying a contingency approach to management accounting.

On the other hand, application of contingency theory in financial accounting research is a more recent than management accounting (Gerhardy, 2002). In 1986, Thomas applied the contingency theory to corporate financial reporting. He argued that the adoption of the contingency approach captures the idea that reporting practices are associated with what he referred to as particular circumstantial variables. He conceptualized the limitations and constraints affecting organizations as falling into two major classes, which are: the environment and the attributes of the organization, hence, the contingent factors are both internal and external to the organization.

At the same time Thomas (1986) was writing there was a growing body of accounting research commonly known as positive accounting theory. Watts and Zimmerman (1986) pioneered the research in the area of positive accounting theory. They investigated the relationships between firm and/or industry characteristics and management's choice of accounting methods based on a theory concerning relative income effects.

Yet, many researchers criticized this theory. Thomas (1986) and Deegan (2009) stated that the empirical results indicate a number of shortcomings of such theory including:

- Inconsistent results across different independent variables and for the same variables in different studies.

- Inconsistent results across different dependent variables.
- An inability to explain the choice of reporting practices that do not affect reported profit.
- It is not value-free because it only explains and predicts what people might do ignoring what they should do.
- It assumes that every managers' (agent) and owners' (principal) actions have a self-interest motive, with the main view of maximizing their own wealth without considering the adverse.

That is why, Thomas (1986) contends that in some situations, the relationships hypothesized by positive accounting theory, between management's accounting choices of policies and practices and their relative income effects will hold, but not necessarily for the reasons the theory suggests.

Thereby, a strong case is established for the adoption and application of contingency theory to the examination of those internal and external factors affecting Islamic banks financial performance.

Thomas (1986) argued that most studies take the form of either testing for differences between certain reporting practices in various countries or the grouping of national accounting systems into relatively homogenous subunits. In both cases, the results are usually attributed to differences or similarities in social, political or economic factors. There is thus an implicit underlying theory that the reporting practices of each country are contingent on certain social, political and/or economic variables.

Belkaoui (1983) is one of the early writers that adopted the contingency approach as the basis to study the influence of the environmental factors upon accounting. He examined the relationships between measures of accounting development adequacy and measures of political, civil, and economic development as a first step in the formulation of a contingency theory of international accounting (Belkaoui, 1983).

Another researcher that adopted the application of the contingency theory as a framework for international accounting studies is Schweikart (1985). Based upon comparative management research, he identified the likely environmental variables for a



contingency framework as falling into one of four categories: educational, economic, political-legal and social.

Many authors have suggested frameworks in their studies to highlight many of the relationships between the contingency theories and their research fields. Figure (4.1), (4.2), and (4.3) illustrate representative economic and contingency frameworks developed by Otley (1980), Schweikart (1985), and Thomas (1991) respectively.

The framework of Otley (1980) as shown in figure (4.1) explains how the contingent variables affect the organizational control techniques and consequently influence the organizational effectiveness.

The financial accounting contingency model developed by Scheweikart (1985) treats the environment as an external contingency factor affecting the organizational structure, strategies and policies as well as the decision-making process. In turn, the organizational structures determine the external information available and the types of decisions required to be made by parties external to the firm. Scheweikart (1985) claims that his model can be used to explain differences in accounting policies among nations as illustrated in figure (4.2).

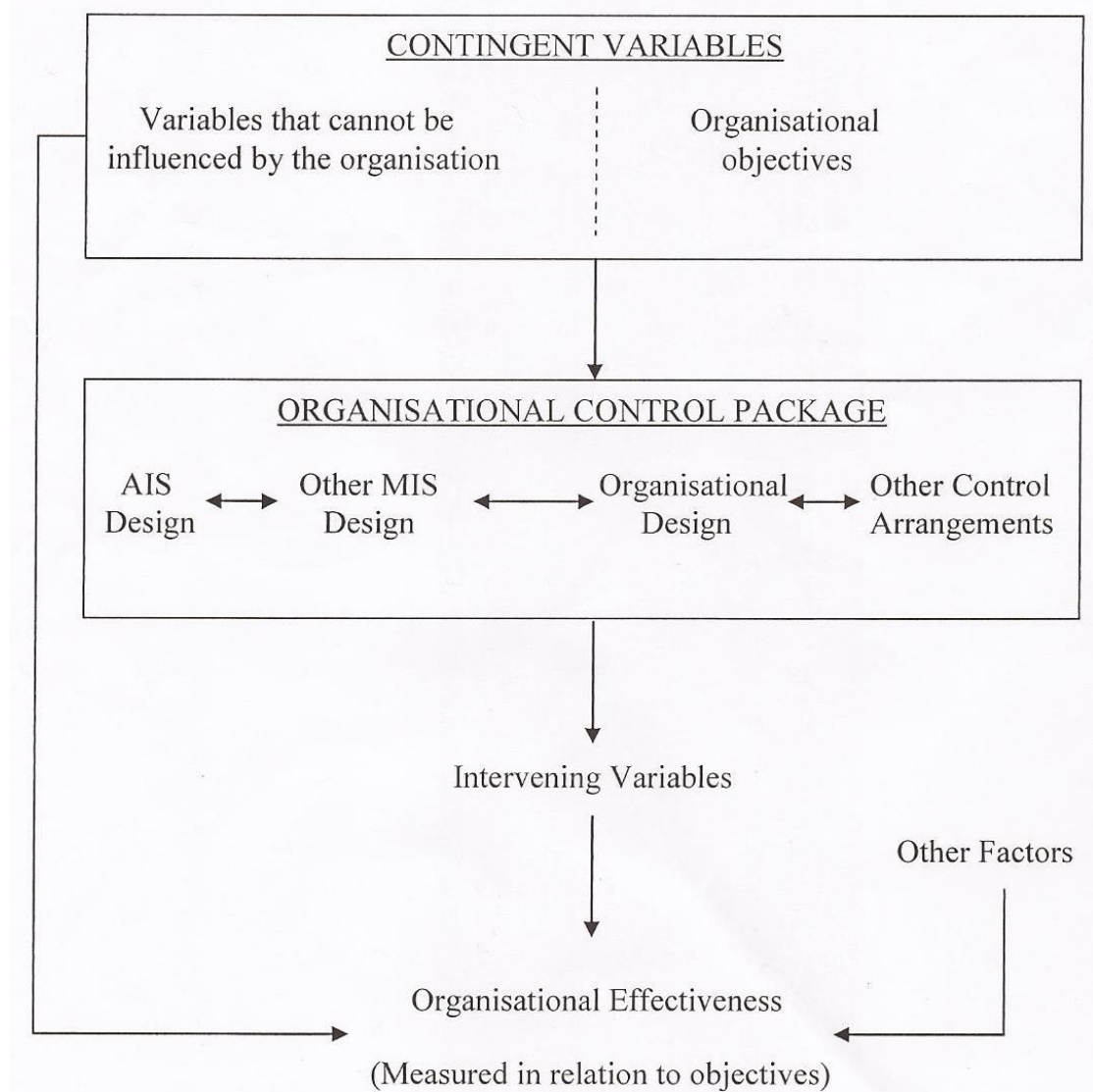
Thomas (1991) developed further the application of the contingency theory to corporate financial reporting system. He indicated that the contingent factors fall into four possible classes as illustrated in figure (4.3). He justified the inclusion of societal variables in his model on the basis that the theoretical framework is essentially done from a contingency framework where the results are usually attributed to differences or similarities in social, political or economic factors. He suggests that the societal variables can be expanded further to include the economic, legal and political systems of the country. His findings showed that while disclosure of forecast information is associated with environmental homogeneity, certain measurement practices are primarily influenced by company size. Figure (4.3) presents the Thomas' (1991) Contingency Framework for Corporate Financial Reporting Systems.

Although the specific terminology and placement of variables vary somehow, each framework suggests that the functions of accounting and control should be viewed as a

complete organizational control package consisting of accounting information systems, performance measurement and organizational design, with the choice and performance consequences of these practices a function of the firm's external environment, organizational objectives and strategies (Ittner and Larcker, 2001).

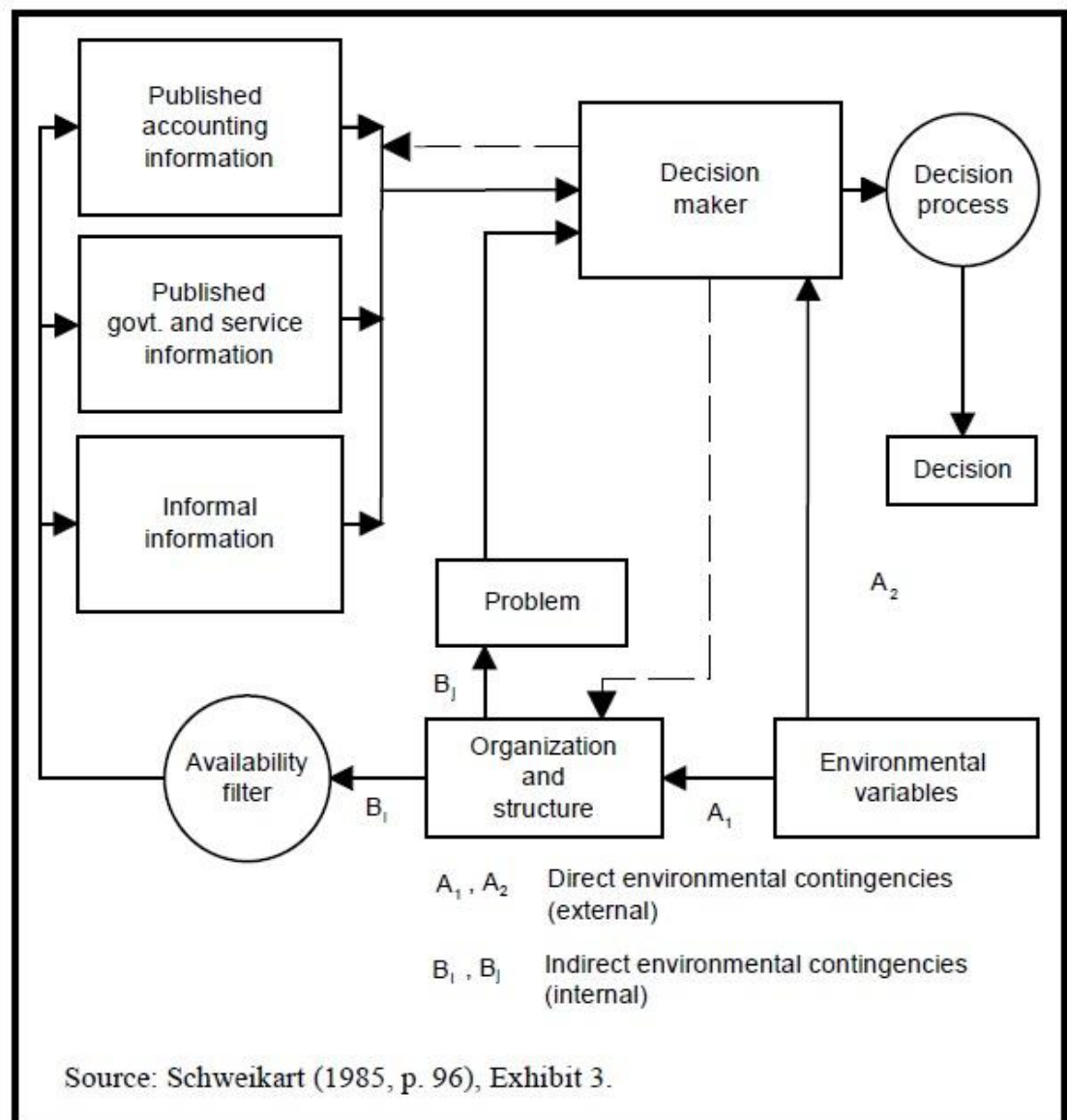
Using these three models, the researcher is developing his own research framework to apply it on the Islamic banking sector in Egypt to study the determinants of performance of the Egyptian Islamic banks in comparison to a sample of Egyptian conventional banks. The research theoretical framework will incorporate both internal and external factors to study the effect on the financial performance of the Egyptian Islamic banks. The research theoretical framework along with the research variables will be discussed in details in the following chapter.

**Figure (4.1) Contingency theory framework**

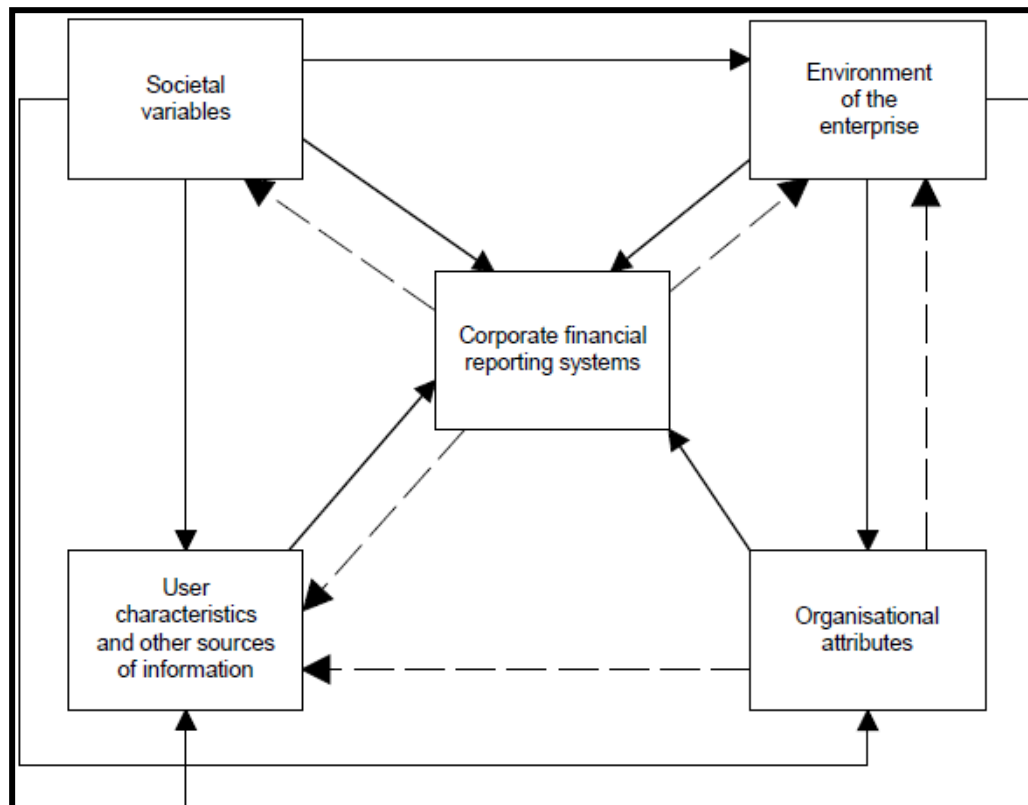


Source: Otley (1980)

**Figure (4.2): Schweikart's (1985) Financial Accounting Contingency Model**



**Figure (4.3): Thomas' (1991) Contingency Framework for Corporate Financial Reporting Systems**



Source: Thomas (1991)

## 4.8 Conclusion

This chapter presents the theoretical background for this research. At the beginning, there was an overview over the different financial and accounting theories used in different researches and studies along with the weaknesses points in every theory. The financial and accounting theories presented had a major disadvantage, which is that each one of the previously discussed theories in section (4.2) was focusing on only one side of the major determinants of profitability and performance. No one theory incorporated many variables at the same time to assess their effect on the performance of companies. The market power theory is focusing mainly on the market structure of the industry ignoring many other factors that need to be taken into consideration by the researcher.

The portfolio theory is another important theory that plays an important role in bank performance studies and is related to the performance of the companies in the stock market and the effect of policymakers' decisions on the rates of return of the company. This approach is far from the concern of this research as the researcher chose not to focus on the stock market performance because the Egyptian stock exchange is an immature market and the data may jeopardize the consistency of the results.

The signaling theory was discussed in section (4.2) as one of the important theories used to explain the performance of banks. According to this theory, the use of equity to finance a project sends a strong positive signal to the market that the bank is very confident in its projects and consequently their profitability level will increase. Thus, the equity ratio is used as a strong determinant of banks' performance while disregarding many other variables that affect the profitability of banks.

Another important theory which is stressing on the importance of size as a major determinant of performance that affect the profitability which is the theory of Conventional Economic efficiency. According to this approach, larger banks are able to finance large numbers of profitable investment opportunities, acquire better access to investment activities and thus achieving higher profitability. Again, the only variable that is relevant in this theory is size.

An important financial theory discussed in section (4.2) is the agency theory which is a supposition that explains the relationship between principals and agents in business. Agency theory is concerned with resolving problems that can exist in agency relationships due to unaligned goals or different aversion levels to risk. The most common agency relationship in finance occurs between shareholders (principal) and company executives (agents). Another central issue dealt with by agency theory handles the various levels of risk between a principal and an agent. Its main concern is risk and its effect on performance.

Another important field of research is concerned with the role of banks in an environment where market participants are asymmetrically informed which is the Financial Intermediation Theory. The presence of asymmetric information (adverse selection) increases transaction costs and require the existence of institutions to keep a check on the behavior of investors. This theory is concerned with the function of the financial institution and its role in pooling funds and directing it to profitable investment opportunities while minimizing transaction costs and reducing market imperfections.

Those theories are the main financial theories that are relevant to this research, however, there is no one theory that was comprehensive enough to incorporate all relevant variables that the researcher aims at including in this study to test for their effect on the profitability and performance of banks.

On the other hand, the contingency theory provides a framework that enables the researcher to study the effect of contingent internal and external variables on the dependent variable of the study, which is profitability. That is why; the researcher chose the contingency theory as the theoretical framework for this study as it provides a more useful tool to answer the questions of the research and achieve the aims of the study.

In addition, this chapter presents an overview of the evolution of various management theories and in specific the contingency theory. It also gives an explanation of the main strengths and weaknesses of the contingency theory and the reasons behind which the researcher chose this theory as the framework for this study. The framework is testing the contingent influence of some chosen variables over the performance of Islamic and conventional banks performing in Egypt and to decide whether the nature of operations of such two types of banks will affect the determinants of its profitability.

The following chapter will discuss the research methodology for the study and shows how it constructs a link between the research problem and the theoretical framework adopted.

## **Chapter Five**

### **Research Methodology**

#### **5.1 Introduction**

This chapter aims at clarifying the methodological foundations of the research. It describes the research design and how it correlates the research problem to the theoretical framework. In other words, this chapter explains the link between the chosen theoretical framework-contingency theory- and the research methods used. The first part discusses the research methodology which identifies the research philosophical approach through explaining the ontology, epistemology, and the research paradigms adopted in this research. Also, this chapter discusses the various research methods and highlights the reasons behind the chosen methods in this research. Moreover, it discusses the data collection methods, the population of the study and the sample size. Finally, it presents the research dependent and independent variables along with a model of the research framework depending on the contingency theory.

#### **5.2 Research Philosophy**

Although research is central to both business and academic activities, there is no agreement in the literature on how it should be defined. However, from the many different definitions offered, there appears to be agreement that: research is a process of enquiry and investigation that is systematic and methodical and leads to knowledge increase (Fellows and Liu, 1997). Buckely et al., (1976) argued that research is conducted in the spirit of inquiry which relies on facts, experience and data, concepts and constructs, hypotheses and conjectures and principles and laws. Additionally, they constitute the language of research, enabling precision in the use of words and communication among those concerned (Then, 1996).

Yin (2003) stated that:

*A research design is a logical plan for getting from here to there, where here may be defined as the initial set of questions to be answered, and there is some set of*



*conclusions (answers) about these questions. Between here and there may be found a number of major steps, including the collection and analysis of relevant data.*

Burrell and Morgan (1979) argued that methodology refers to the methods and steps used to conduct research. Youssef (2007) stated that any methodological position consists of three main elements which are the Ontology, the Epistemology and the Research Paradigm.

### **5.2.1 Ontology**

Ontology is a central branch of metaphysics. Most positions that can be taken in ontological debates have been firmly established by various philosophers in the course of human history. Ontology is concerned with explaining the ultimate nature of reality being and the world (Scapens and Yang, 2007). Ontology according to Goles and Hirschheim (2000) refers to the nature of the world around us; in particular, that slice of reality which the scientist chooses to address. Social ontology refers to assumptions held about the nature of social reality that is, whether reality is objective and external to the individual, or whether it is subjective and cognitively constructed on an individual basis (Long et al., 2000).

According to Goles and Hirschheim (2000), the nature of social science falls between two extreme positions which are 1) the realism and 2) the relativism or instrumentalism or nominalism. The ontological assumption about realism is that reality is external to the individual. It suggests that the universe is composed of objectively given, rigid objects and structures. These exist as empirical entities, on their own, independent of the observer's appreciation of them. This contrasts sharply with the other extreme position of nominalism. This assumption holds that reality is a subjective state of the mind. Reality is interpreted by the individual, it is socially perceived. Socially conveyed concepts and names direct how reality is perceived and constructed. Therefore, reality differs with multiple and various languages and cultures. What is subjectively experienced as an objective reality exists only in the observer's mind.

Youssef (2007, p.162) stated that "questions of social ontology are concerned with the nature of social entities which are the essence of the phenomenon under investigation.

The central point of orientation is the question of whether the social entities can and/or should be considered objective with a reality external to social actors as opposed to being social constructions built up from the perceptions and actions of social actors”.

The position adopted by the positivist is one of realism while the other ontological standpoint is the one supported by anti-positivism.

As far as this research is concerned, the data is collected through the financial reports published by the banks involved in the study. This fact reveals no doubt about the matching of this research ontological nature with the realism position.

### **5.2.2 Epistemology**

Like any human action, research is grounded on philosophical perspectives, being either implicit or explicit. Ignoring the philosophical ground can seriously affect the quality of research. According to Easterby-Smith and Lyles (2011), understanding the philosophical positioning of research is particularly useful in helping researchers clarify alternative research designs and methods. The question associated with epistemological assumptions is about the basis of knowledge and in what manner knowledge can be forwarded to others (Long et al., 2000). Bryman and Bell (2007) argue that an epistemological issue concerns the question of what is or should be regarded as acceptable knowledge in a discipline.

According to Burrell and Morgan (1979), epistemology can be defined through two streams of knowledge; positivism and anti-positivism. In the positivistic epistemological assumption, researchers focus on empirical evidence and hypothesis testing, looking for fundamental laws and causal relationships. While in the later, knowledge is relative. Researchers focus on meaning and examine the totality of a situation (Cibangu, 2010; Goles and Hirschheim, 2000).

The positivist approach believes that the subject under analysis should be measured through objective methods rather than being deduced subjectively through impression, reflection or perception (Remenyi, 1998). Positivists adopt the idea that reality is objectively given and can be described by measurable facts that are totally independent from the researcher's instruments (Orlikowski and Baroudi, 1991).

Burrell and Morgan (1979) argued that the positivist assumption is used to characterize epistemologies which seek to explain and predict what happens in the social world by searching for regularities and causal relationships between its components and generally minimize the whole into the simplest possible components in order to facilitate analysis. The positivist epistemology is in essence based upon the traditional approaches which dominate the natural sciences, while the anti-positivist epistemology is firmly set against the utility of a search for laws and regularities in the world of social affairs (Easterby-Smith and Lyles 2011; Remenyi, 1998).

For the anti-positivist, the social world is essentially relativistic and can only be understood from the perspective of the persons who are directly involved in the activities which are to be examined. This approach is known as the interpretative or phenomenological approach. From this standpoint, the social science is seen as being essentially subjective rather than objective. Anti-positivists tend to reject the idea that science can generate objective knowledge of any kind. The anti-positivists base their assumption on the idea that reality is given or socially constructed. According to this philosophy, the researcher should not gather facts or measure the occurrence of patterns, but rather appreciate the different constructions and meanings people place upon their own experiences and the reasons for these differences (Pacitti, 1998). The interpretivist, when collecting data, he follows an approach that is characterized by an in-depth inquiry into human behavior and consequently generating significant understanding of the social dimensions of the research (Saunders et al., 2009). This approach tries to understand and explain a phenomenon rather than search for external causes or laws (Easterby-Smith and Lyles 2011; Remenyi, 1998).

Silverman (1998) made a comparison between the two schools of science which is represented in table (5.1).

**Table (5.1) Comparison between two schools of science**

<b>Approach</b>	<b>Concepts</b>	<b>Methods</b>
Positivism	Social structure	Quantitative
	Social facts	Hypothesis testing
Interpretive social science (anti-positivism)	Social construction meanings	Qualitative hypothesis generation

Source: Silverman (1998)

Goles and Hirschheim (2000) argued that generally, positivism has enjoyed great success. It has had an especially successful relationship with the physical sciences where a tremendous growth in knowledge has been experienced. Throughout history, researchers have sought to apply positivism to the human realm, supporting or modifying its conception as necessary.

The validity of positivism as a train of thought in social science was criticized by many researchers (Tashakkori and Teddlie, 1998; Lincoln and Guba, 1985; Berger and Luckmann, 1967).

Positivism looks at reality as being objective, concrete, and single. The main focus is on what is general, average, and representative in order to make possible generalization and prediction. Positivism (which is more inclined towards quantitative research) differs from other paradigms like Interpretivism (better dealt with through qualitative methods) as the first insists on the prevalence of the positivist paradigm in many areas of social research. Interpretivists, on the other hand, claim for multiple and socially constructed realities. Their focus is on what is specific and unique in order to understand and generate interpreted results, but, yet, fail to explain and justify how and why their qualitative approaches are feasible (Burrell and Morgan, 1979).

From the philosophy of science point of view, the current state of accounting research is very interesting in the sense that, while positivism is completely obsolete in the philosophy of science, it still seems to be the widely used mode of accounting research

(Lukka, 2010). The contingency theory lays claim to being strongly positivist in sociological terms as argued by Donaldson (2005). According to his positivist view, the contingency theory is a general theory of organizations, which holds across many different kinds of organizations and in many different settings. The theory is positivist in the sense that the methods used to test the theory include scientific methods such as quantitative techniques and controlling for external variables.

Since the ontological assumption of this research is realism due to the methodology of data collection which is through the financial statements and reports of the banks in the study, and due to the adoption of the contingency theory that constitutes the theoretical framework of the research, the best epistemological assumptions is the positivism.

### **5.2.3 Research Paradigms**

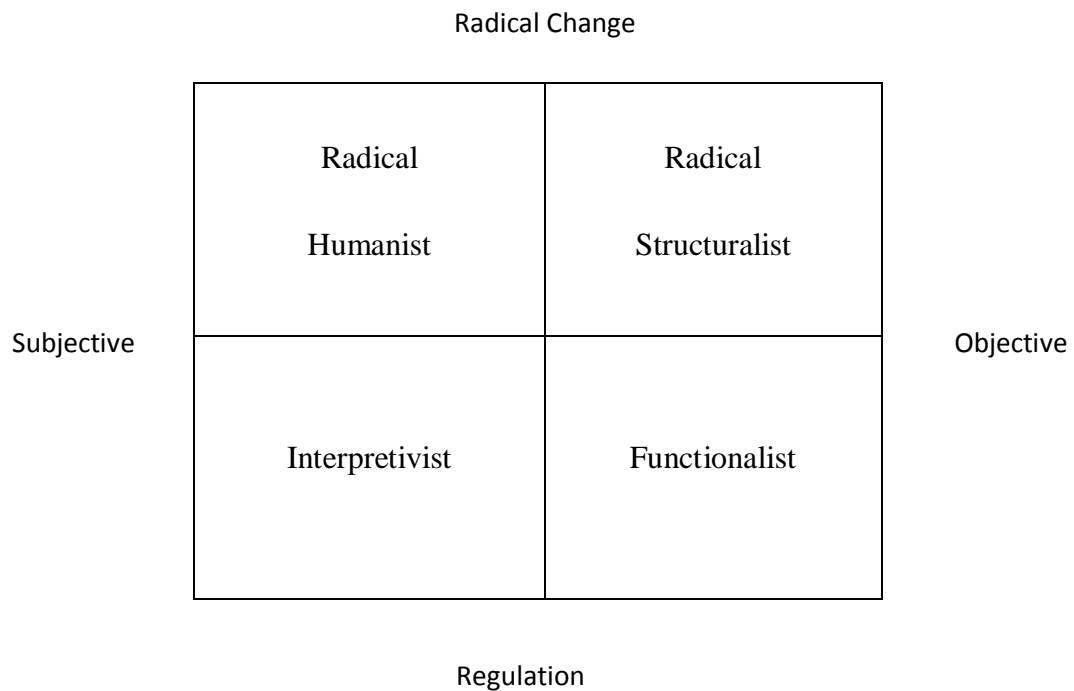
There has been a division between two schools of thoughts, objective and subjective, each representing a different view of society. While some theorists were advocating a subjective view of society, others adopted the objective view.

The debate in many respects started with the publication in France in 1966 and Britain in 1969 of Louis Althusser's work for Marx. This presented the notion of an epistemological break in Marx's work and emphasized the polarization of Marxist theorists into two camps: those emphasizing the 'subjective' aspects of Marxism (Lukacs and the Frankfurt School, for example) and those advocating more 'objective' approaches, such as that associated with Althusserian structuralism (Burrell and Morgan, 1979).

In response to these developments and debates, which has often been confusing, Burrell and Morgan (1979) expanded the collective consciousness of researchers by introducing a paradigms' typology for the analysis of social and organizational theory.

By identifying fundamentally different assumptions concerning the nature of social science and the nature of society, they created a matrix composed of four different research paradigms: functionalism, interpretivism, radical structuralism, and radical humanism (Goles and Hirschheim, 2000). The following figure (5.1) shows the matrix.

**Figure (5.1): Burrell & Morgan's four paradigms**



Source: Burrell & Morgan (1979)

This paradigm has provided the dominant framework for the conduct of academic sociology and the study of organizations. It represents a perspective which is firmly rooted in the sociology of regulation and approaches its subject matter from an objectivist point of view. It is characterized by a concern for providing explanations of the status quo, social order, consensus, social integration, solidarity, need satisfaction and actuality. It approaches these general sociological concerns from a standpoint which tends to be realist, positivist, determinist and nomothetic (Burrell and Morgan, 1979).

Silverman (2013); Ali (2000); Goles & Hirschheim (2000) and Burrell & Morgan (1979) agreed that the researcher is totally independent from the environment under study. The main goal is to reach an explanation of how separate elements and factors of a system (i.e. social) connect together to create an integrated whole.

The interpretive paradigm is concerned with understanding the world as it is, to understand the fundamental nature of the social world at the level of subjective experience. It seeks explanation within the field of individual consciousness and

subjectivity, within the frame of reference of the participant as opposed to the observer of action. In other words, they look forward to give meaning to events under research through analyzing how people perceive their realities. Thus, this paradigm describes the world through the researcher's consciousness and perception (Baradie, 2008; Burrell & Morgan, 1979).

The radical humanist paradigm is defined by its concern to develop sociology of radical change from a subjectivist standpoint. One of the most basic notions underlying the whole of this paradigm is that the consciousness of man is dominated by the ideological frameworks with which he interacts, and that these drive a cognitive wedge between himself and his true consciousness. It focuses on getting liberated from all forms of barriers, in particular; ideology, power, psychological compulsions and social constraints. Finally, the radical humanists seek radical change. They stress the role that different social and organizational forces play in understanding the process of change (Baradie, 2008; Burrell & Morgan, 1979).

Theorists adopting the radical structuralists' paradigm advocate sociology of radical change from an objectivist standpoint. Whereas the radical humanists forge their perspective by focusing upon 'consciousness' as the basis for a radical critique of society, the radical structuralists concentrate upon structural relationships within a realist social world. The radical structuralists have a view of society and organizations, which emphasizes the need to exceed the limitations placed on existing social and organizational arrangements. It focuses primarily on the structure and analysis of economic power relationships. It simply assumes that contemporary society is characterized by conflicts and contradictions which generate some radical change through political and economic crises and revolutions (Baradie, 2008).

Burrell & Morgan (1979) stated that the four paradigms are mutually exclusive and offer alternative views of social reality. They offer different ways of seeing and a combination between them is impossible because they are contradictory and the researcher cannot use more than one paradigm at any given point in time since the acceptance of one assumption implicitly imply the rejection of others.

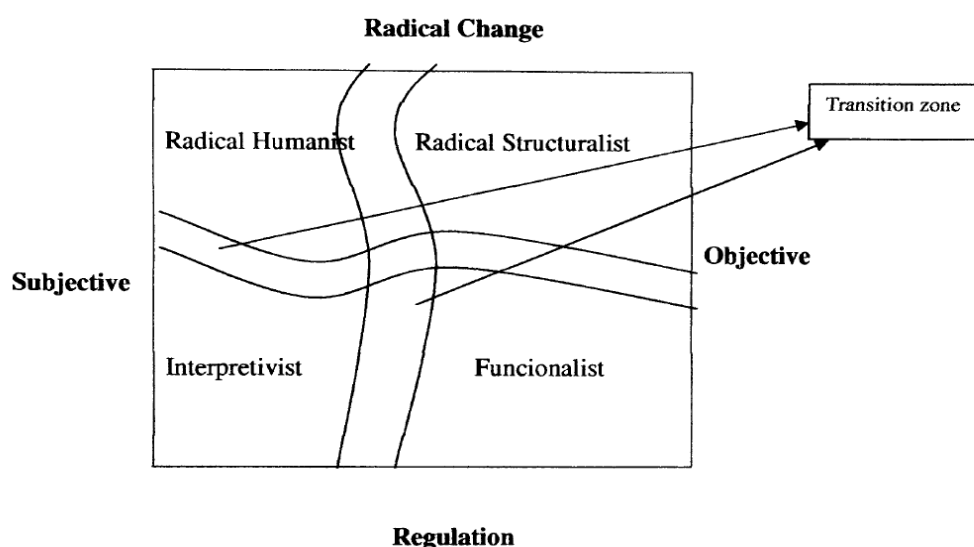
On the other hand, Gioia and Pitre (1990) argued that different perspectives arising from different paradigms might be linked to yield a more broad perspective of organizational phenomena. Unlike Burrell and Morgan (1979), they recognized the existence of boundaries between paradigms, yet, they consider those boundaries to be mal-defined. They argued that it is difficult if not impossible to specify exactly where one paradigm ends and another begins. They mentioned that; in case of the existence of hard and fast barriers between paradigms, they postulate the existence of transition zones or regions with shifting lines of demarcation as shown in figure (5.2). They argued that pluralism could bridge between these zones.

Many other approaches to multi-paradigm research and pluralism emerged. Schultz and Hatch (1996) introduced the concept of interplay between paradigms. They argued that there are three paradigmatic positions for multi-paradigm research which are: paradigm incommensurability, paradigm integration and paradigm crossing.

Paradigm incommensurability excludes any possibility of effective 'joint ventures' between paradigms. Paradigm integration merges contributions from different paradigms in an attempt to achieve a more general model or theory. Paradigm crossing assumes interdependent relationships between paradigms by emphasizing inter-paradigmatic contrasts and connections.



**Figure (5.2): Burrell and Morgan's four paradigms with transition zones**



Source: Gioia and Pitre (1990)

Jackson (1999) argued that management science will get the greatest benefit from pluralism while managing complex problems when it employs a meta-methodology approach to take advantage of the benefits to be gained from using methodologies that are based upon multiple paradigms. In addition, it encourages the combined use of various methods, models, tools and techniques to ensure maximum flexibility while intervening to solve problems.

Taking into consideration the nature of this study, the researcher is using the functionalist paradigm. This paradigm generates regulative sociology in its most fully developed form. It is a perspective which is highly pragmatic in orientation, concerned to understand society in a way which generates knowledge that can be eventually used. This approach is often problem-oriented and very much concerned with providing practical solutions to real existing problems (Burrell and Morgan, 1979). This paradigm best matches the realism ontological assumption and the positivistic epistemology. This view is very much in consistence with the researcher's belief that the choice of the methodologies to be employed in this research should be guided by the problem of the research on hand, the resources available and the data collection method used to solve the problem.

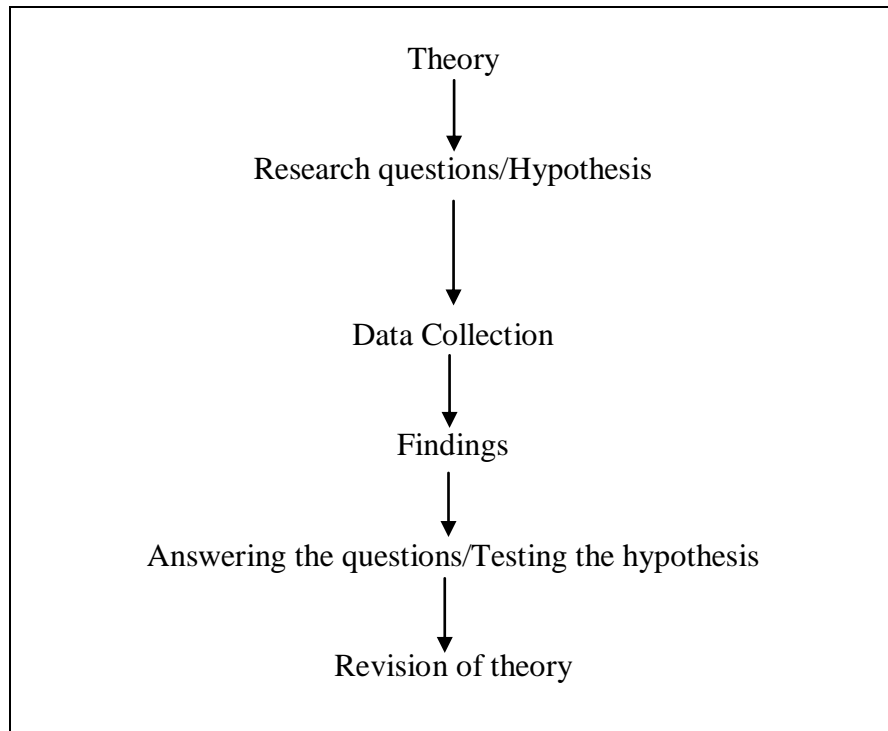
#### **5.2.4 Research Strategy**

According to Bryman and Bell (2015) and May (2011), research comprises two elements: theoretical and empirical. By linking these two elements together, two kinds of research strategies emerge, deductive research strategy and inductive research strategy. Both strategies are accepted as appropriate business research strategies.

Deductive research (theory then research) represents the most common view representing the nature of the relationship between theory and research. It is a type of strategy in which theory informs research at the outset and then hypotheses dictate what evidence the researcher is looking for. Deductive researches arrive at their conclusions by applying reasons to a given set of premises (Landman, 1996). This strategy focuses on studying theories by reviewing the literature then it deduces hypotheses which are eventually subject to empirical study which will either result in confirming or rejecting the hypotheses (Bryman and Bell, 2011; Saunders et al., 2009). The researcher must both deduce a hypothesis and then translate it into operational terms. This also means that he needs to specify how data can be collected in relation to the concepts that make up the hypothesis. Theory and then the hypotheses deduced from it come first and then define the process of gathering data (Bryman and Bell, 2011). The sequence can be depicted in the outlined figure (5.3).

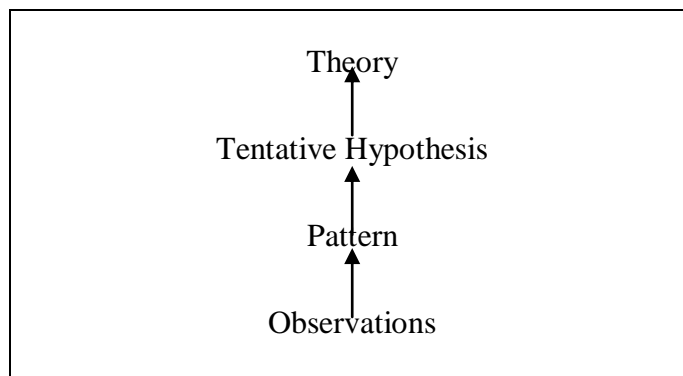
Inductive research (research then theory) aims to get a closer understanding of the research context to generate a theory. Research comes before theory, where the researcher is aiming at discovering a theoretical proposition. In induction, conclusions are drawn from direct observation of empirical evidence (Sekaran, 2003). These conclusions are eventually used to develop the theory. Such research is not based on hypotheses; instead, theory is generated and built through the analysis of, and interaction with, the empirical data. In this strategy, the researcher is looking for patterns in data and relationships between variables. This type of research is usually associated with the interpretivist qualitative research strategies (Bryman and Bell, 2011; May, 2011; Saunders et al., 2009). The induction approach is outlined in figure (5.4).

**Figure (5.3): The steps of deductive research**



Bryman (2012)

**Figure (5.4): The steps of inductive research**



Source: Bryman (2012)

After considering both deductive and inductive research strategies, the researcher decided to use a deductive strategy as it best serves in the realization of the goals of this research. There is no intention of the researcher to generate a new theory but just to revise an existing theory by studying the determinants of performance of Egyptian Islamic and conventional banks. The deductive strategy will enhance the researcher's

attempt to build a solid theoretical background for the research model and its applications to identify research gaps.

### 5.2.5 Qualitative Versus Quantitative Research Methods

Research methods should be chosen as a function of the research situation. Although each research method has its own distinguished characteristics, however, overlapping areas exist and result in some degree of complexity in the process of strategy selection (Soliman, 2003). In order to avoid any undesired misfit between the desired outcome of the research and the chosen strategy, there are some conditions that should provide the grounds for the strategy choice. Those conditions are: the type of questions posed; control over actual behavioral factors; and the degree of focus on historical or contemporary events (Yin, 2003). Table (6.2) illustrates the associations between the most common research strategies and the three previously mentioned conditions.

**Table (5.2): Research Strategies versus Characteristics**

<b>Strategy</b>	<b>Form of research question</b>	<b>Requires control over behavioral events</b>	<b>Focus on contemporary events</b>
Experiment	How, Why	Yes	Yes
Survey	Who, What, Where, How many, How much	No	Yes
Archival analysis	How, Why	No	Yes\No
History	How, Why	No	No
Case study	How, Why	No	Yes

Source: Yin (1994)

Research methods are categorized into two distinct types: quantitative and qualitative. Some authors referred to a third approach, the mixed methods, which is a combination

of the quantitative and qualitative approaches. All these approaches refer to the method of data collection and analysis adopted in the study. The former approach grows out of a strong academic tradition that places considerable trust in numbers that represent facts, opinions and concepts. While the latter concentrates on words and observations to express reality and attempts to describe people in natural situations.

Quantitative research uses methods adopted from the physical sciences that are designed to ensure objectivity, generalizability and most importantly reliability (Baradie, 2009).

According to Amaratunga et al., (2002), the researcher using quantitative methods is looking for assertion, prediction and generalization of findings. Weerd-Nederhof (2001) stated that quantitative methods cover the unbiased and random choice of participants from among the population under study. He argued that in the quantitative research, the researcher is considered external to the actual research and the results are believed to be replicable no matter who conducts the research. One more strength of quantitative concepts is apparent as its methods yield quantifiable and reliable data that is usually generalized to larger populations (Hyde, 2000). Bryman and Bell (2003) stated the quantitative research strategy uses scientific methods of identifying the research questions and sampling techniques with a strong theoretical framework. Questions of the research are expressed in terms of hypotheses that are tested through estimation models. The estimation models are analyzed using mathematical equations, statistical analysis and econometric measurements, with which the researcher will be able to answer the research questions.

When using the quantitative approach; data are collected using semi-structured interviews questionnaires and primary or secondary data that are publicly available. The quantitative research approach permits the establishment of causal relationships between variables of the study, it enhances the ability to make inferences and forecasts, it affords generalization and replication of results, and it leads to improvement of research validity and originality. Having all these mentioned advantages for the quantitative approach, yet there are also many drawbacks raised by scientists. One of the major drawbacks is the difficulty of finding suitable variables to enable the researcher to perform the study he wants and this leads researchers to use proxy variables. However, the use of proxy variables is not equivalent to the actual variables

and does not yield the same results. Also, a major problem may face the researcher which is the use of wrong model specification such as the inclusion of irrelevant variables or the exclusion of important variables and other measurement errors for the dependent or independent variables (Adelopo, 2010).

The qualitative research, as a different point of view, is referred to it as the data collection techniques of observations and data analysis techniques that are non-quantitative (Bryman, 2012). Atkinson and Shaffir (1998) stated that qualitative research, rooted in phenomenological and interpretive methodological principles, is most naturally situated within the theoretical framework of symbolic interaction, which is associated with phenomenology's principles. It includes the use of in-depth interviews, ethnography, observations, action research and focus groups. It provides the opportunity to make meanings of both spoken and unspoken responses through the interaction with the subject of the investigation, thereby removing the problems associated with using representatives' variables as in the case of quantitative research. It provides a detailed description of events, situations and interaction between people and things that are related to the phenomenon under study. Despite the numerous advantages of the qualitative research methods, it has many disadvantages. These include the problem of generalizability and of replicability of the results. There is a main problem that arises from the inseparability between the researcher and the subject of investigation which leads to biasness and affects the reliability of the results (Easa, 2012; Bryman and Bell, 2011; Adelopo, 2010; Ghauri and Grønhaug, 2010; Saunders et al., 2009; Cooper and Schindler, 2008; Denzin and Lincoln, 2005).

The selection between the two types of research methods is depending to a large extent on the nature of the research. Indeed, Saunders et al. (2009) argued that some issues can be suitably researched using a quantitative method due to the difficulty of gathering appropriate qualitative data like in the case of interviews with senior managers or government heads, since they are involved in strategic decision making and the information they have is considered to a large extent sensitive and classified. Researchers may also be constrained by time and finance resources so they prefer to use previously collected and publicly available data as long as the data is reliable and instead of taking a considerable long time to negotiate access to interviews.

Specifically in this investigation, the nature of the study entailed the adoption of a deductive approach to the relationships between theory and research to match with the functionalism paradigm, the realism ontological assumption and the positivistic epistemology. Consequently, based on the arguments mentioned above, the researcher finds it imperative to use the quantitative research methods because it better fits and serves the goal of the research. These philosophical and strategic research choices are due to the nature of the investigation which lends itself to these methodologies. These choices are also due to the resources available in terms of time and finance.

### **5.3 The Definition of the Research Problem and Its Relative Importance**

Albert Einstein noted that “The formulation of a problem is often more essential than its solution.” A problem well defined is a problem half solved (Easa, 2012).

The research problem of this study has been addressed as follows: “Do Egyptian Islamic banks perform better than Egyptian conventional banks? What are the main determinants of performance of Egyptian Islamic banks? Is there a difference between the determinants of performance of Egyptian Islamic banks in comparison to Egyptian conventional banks given the fact that they both work in the same country and under the same rules and regulations?”

The importance of this research is discussed from two different points of view: the academic and the practical perspectives.

#### **5.3.1 The Academic Perspective**

The majority of Islamic banking studies and previous attempts focused primarily on the conceptual issues underlying interest-free financing. Hassan and Bashir (2003) argued that the issues of viability and continuation of Islamic banking and the ability of Islamic banks to mobilize savings, pool risks and facilitate various types of financial transactions did not get enough covering in the existing literature. Indeed, few studies have focused on the policy implications of eliminating interest payments like Bashir (1996), Khan (1986) and Khan and Mirakhor (1987).

Hassan and Bashir (2003) argued that the lack of complete data hindered comprehensive analysis of the Islamic finance experience in the last three decades and has yielded inconclusive results (Zaher and Hassan, 2001; Bashir, 1999; Hassan, 1999).

The ongoing trend of financial liberalization and deregulation has created new challenges for Islamic banks. The integration of global financial markets has put Islamic banks in a fierce competition with conventional banks. In order to be able to meet this competition successfully, Islamic banks are forced to design and innovate islamically acceptable instruments that can cope with the continuous innovations in financial markets. In addition, Islamic banks should invent new channels for fund mobilization and utilization that offer competitive rates of return at acceptable degrees of risk (Hassan and Bashir, 2003).

As was previously mentioned in chapter three, many researches were performed to study the contingency theory and its applications in the field of managerial control and other organizational studies. However, few studies examined the application of the contingency theory in the area of financial accounting and this is considered a very recent development according to Gerhardy (2003).

The contingency theory is a class of behavioral theory which claims that there is no best way to structure an organization, to lead a corporation or to make decisions. Instead, the optimal course of actions is contingent upon internal and external factors relevant to a specific organization. Since the purpose of this research is to propose a framework to examine the relationship between contingent factors and the performance of Islamic banks in Egypt, this contingency framework proposed for the study will provide clarity in screening and identifying the factors that affect the performance and profitability of Islamic banks and make a comparison with the performance of conventional banks and their determinants. To the knowledge of the researcher, no previous studies were performed in Egypt to discover the determinants of performance of Islamic banks in comparison to conventional banks within a contingency theory framework. This research is an effort to fill this research gap.



### **5.3.2 The Practical Perspective**

The practical importance of Islamic banking stems from its rapid growth that reached 17.6% in comparison to 3% growth of conventional banks with an expected increase of 2% to reach 19.7% over 2013-2018 (EY, 2013).

Islamic banking and finance has a niche hold on the market and it is growing at a tremendous rate. It is considered nowadays as a solid industry that complements conventional banking. It does offer great potential and further growth prospects. Some of the most active countries in Islamic finance (UAE, Bahrain and Saudi Arabia) represent the highest level of liquidity in today's global market (EY, 2013).

On the other hand, out of the 1.6 billion Muslims in the world, only around 14% use traditional banks, and a large number might find Islamic finance as an attractive option for their savings and financial needs (EY, 2013).

Though the origin of Islamic banking finance can be traced back to the sixties, however, its full development happened in the mid of the seventies after the oil crisis of 1973. By time, the Islamic financial institutions became more innovative and developed more complex and advanced Islamic financial instruments to meet the demands of customers. The new financial products ranged from corporate finance and asset management to derivatives specially designed to manage excess liquidity (EY, 2013).

Practically, the Islamic banking and finance research has several implications for investors and banking firms. Processing evidence about what drives banks' profitability will help managers and bankers in understanding which internal, external, economic and financial factors are critical to track and analyze in order to achieve operational and financial success. If Islamic banks' managers know the factors that are likely to boost performance, this will consequently create more competition in the marketplace and in turn, it will help in keeping prices low and providing multiple and tempting substitutes for Islamic banking clients (EY, 2013).

Individual investors can make use from the findings of this research to personally set their retirement plans through equity investing. Identifying the determinants of

performance (ROA, ROE, and NIM) will help new investors in analyzing financial statements and make informed equity investment decisions (Aremu et al, 2013).

In a debt driven economy like Egypt, the need to save and guarantee future financial security is becoming more imperative and of vital importance. A well-educated investor possessing comprehensive financial data about a certain financial institution will be better able to take a wise and profitable investing decision. And as a consequence, this will help enhancing his individual wealth and prosperity growth which will eventually influence the general economy as a whole. Especially those depositors in Islamic banks may also be interested in characterizing the performance of their banks since they are not entitled to fixed returns ways of investments (Aremu et al, 2013).

Moreover, the findings of this research have considerable policy relevance for managers and regulators. While managers are keen to determine the outcomes of previous management decisions, bank regulators are more concerned about the safety and soundness of the banking system in order to preserve public confidence and monitor banks' performance to be able to early detect those banks that are experiencing severe problems. Without the persistent monitoring of banks' performance, problems can remain unnoticed and this could lead to possible future financial failure (Aremu et al, 2013; Hassan and Bashir, 2003).

Since the Islamic banking industry is considered new in comparison to conventional banking, there is still much room for people willing and capable of providing the needed innovations for the industry.

## **5.4 Data Collection or Sources**

The nucleus of the research onion as suggested by Saunders et al. (2009) relates to the data collection technique. This part of the research process is very important and crucial in the research endeavor. And as was previously mentioned, the selections of the research technique, including the data collection, depends to a large extent on the nature of the investigation and the availability of resources especially the researcher's skills, time and finance (Bryman and Bell, 2015; Saunders et al, 2009).

Based on the research problem illustrated in the previous section, the researcher's aim is to answer the following questions:

1. Is the Islamic banks' performance better than that of conventional banks in Egypt?
2. What are the contingent factors that affect the performance of the Islamic banks?
3. Is there a difference between the contingent factors that affect the Islamic banks' performance and those that affect the performance of conventional banks?

In order to answer those questions, the researcher needs to collect the suitable data that serve this purpose.

There are two types of data: primary data and secondary data. Primary data are data gathered and assembled specifically for the project at hand. While secondary or historical data are data previously collected and assembled for some project other than the one at hand (Zikmund, 1994).

Secondary data are indispensable for most organizational researches. Secondary data can almost be gathered faster and at a lower cost than primary data. It can usually be obtained rapidly. Secondary data can be obtained from books, government publications of economic indicators, statistical abstracts, databases and annual reports (Zikmund, 1994).

For the purpose of this investigation, the researcher is going to depend on secondary data for the reasons mentioned above. The data of this research covers the period from 2002 to 2010. The data were collected from the annual financial reports of banks included in the study. Many sources have been consulted in order to check to the reliability and consistency of data on hand.

The annual reports provide a considerable amount of information through which the researcher can project the activities of the organizations included in the study. Statutory requirements for organizations to provide certain information make it easier for researchers to access reliable data to use in research. Secondary data, especially those that are legally required such as the annual reports, have societal and statutory

legitimacy and enjoy very high neutrality. These features make them less error prone and more reliable (Adelopo, 2010).

It is worth to be mentioned that, the period of the study ended in 2010 and it excluded all recent years' data because of the circumstances that the Egyptian country passed through since the beginning of 2011. The Egyptian revolution started in January 2011, and the country had passed through many difficult conditions and political and economic turbulences that negatively affected every aspect of life in Egypt. The Banking and financial sectors were badly injured and terribly damaged because of the stagnation and stoppage that struck the country as a result of the revolution. As a consequence, the financial reports of banks starting from 2011 are considered to be distorted and could affect the reliability and consistency of the results aimed to reach. That is why, the researcher didn't include any recent financial information in the study, yet, the study will still be considered valid and relevant because nowadays the Egyptian country is moving more towards stability and achieving high growth rate to overcome the past fluctuating periods. Thus the results of this research can be generalized over the upcoming stabilized periods where the banks are expected to perform within the same working and operating stable conditions as the period before 2011.

## **5.5 Research design**

### **5.5.1 Population and Sampling**

**Population:** It refers to the entire group of people, events, or things that the researcher wishes to investigate. The population in this research is the Islamic commercial banks and the conventional commercial banks in Egypt.

**Sample:** The process of sampling involves any procedure using a small number of items or parts of the whole population to make conclusions regarding the whole population (Zikmund, 1994).

A sample is a subset or some part of a larger population, it comprises some selected members. In other words, some elements of the population will form the sample. By studying the sample, the researcher should be able to draw conclusions and estimate

some unknown characteristics that would be generalized to the population of interest (Sekaran, 2003; Zikmund, 1994).

In order to test the hypotheses developed above, it is necessary to make use of a selection of banks reports from which, through analysis, to test hypotheses (Crowther, 1999).

### **5.5.2 Sampling Techniques**

There are several alternative ways of taking a sample. The major alternative sampling techniques may be grouped into probability techniques and non-probability techniques. In probability sampling every element in the population has an equal probability of selection. While in non-probability sampling the probability of any particular member of the population being chosen is unknown as it is quite arbitrary as researchers rely heavily on personal judgment. Probability sampling is used when the representativeness of the sample is of importance in the interest of wider generalization of the study results. However, when other factors than generalization become critical or important, non-probability sampling is generally used (Sekaran, 2003; Cooper and Schindler, 1998; Zikmund, 1994).

#### **5.5.2.1 Probability Sampling**

All probability samples are based on chance selection procedures. This eliminates the bias inherent in the non-probability sampling procedures because the probability sampling process is random. There are many types of probability sampling which are: simple random sampling, systematic sampling, stratified sampling, cluster sampling, and multistage sampling. In simple random sampling, the researcher assigns each member of the sampling frame a number, and then selects sample units by a random method. While in systematic sampling, the researcher uses natural ordering or order of sampling frame, selects an arbitrary starting point then selects items at a preselected interval. In stratified sampling, the researcher divides the population into groups and randomly selects subsamples from each group. Variations include proportional, disproportional, and optimal allocation of subsample sizes. In cluster sampling, the researcher selects sampling units at random, and then does complete observation of all units in the group. Finally, in multistage sampling, progressively

small areas are selected in each stage. Generally, the researcher performs some combination of the first four techniques. Each technique has its own advantages and disadvantages; however, the researcher will choose the technique that best serves his goals while taking into consideration the cost effect (Zikmund, 1994).

#### **5.5.2.2 Non-Probability Sampling**

According to Zikmund (1994), non-probability sampling is divided into four types: convenience, judgment, quota and snowball sampling. Convenience sampling: the researcher uses most convenient sample or most economical sample, i.e. the collection of information from members of the population who are conveniently available to provide it (Sekaran, 2003). In judgment sampling, an expert or experienced researcher selects the sample to fulfill a purpose, such as ensuring all members have a certain characteristic. In quota sampling, the researcher classifies population by pertinent properties, determines desired proportion of sample from each class and fixes quota for each interviewer. Lastly, snowball sampling is a technique where initial respondents are selected by probability samples; additional respondents are obtained by referral from initial respondents.

The researcher decided to use non-probability sampling while deciding about the sample to use in the study. Among all the banks operating in the Egyptian market, it is necessary to restrict the analysis to a sample of banks, given the number of banks producing annual reports. The researcher depended on judgment to select the sample of conventional banks. Selection of banks has therefore been based upon the following argument.

- The Islamic banks included in the study are: Faisal Islamic Bank and Albaraka Bank. Although the choice of the two banks is dictated primarily by data availability, since they are the only two fully Islamic banks operating in Egypt for a long period, their experiences convey a message about the contemporary experience of Islamic banks in Egypt.
- The sample of conventional banks selected for the comparison with the Islamic banks must be of sufficient size that published reports are readily available and the banks must have been in existence for a sufficient period of time to enable a

longitudinal study to be undertaken. This latter criterion therefore necessitates the exclusion of recently formed banks.

- The sample of conventional banks is limited to those banks listed in the Egyptian Stock exchange so as to make sure that all banks included in the research are subject to the same rules and regulations as the two Islamic banks included in the study as they are listed in the stock exchange.
- The sample of conventional banks is limited to those banks that are commercial and private excluding public banks and specialized banks.

### **5.5.2.3 Sample of the study**

The research sample is composed of two groups: Islamic banks and conventional banks. The Islamic banks working in Egypt are two banks only which are: Faisal Islamic bank of Egypt and Al-Baraka bank. Currently, there is a third Islamic bank working in Egypt which is the Abu Dhabi Islamic Bank (ADIB). However, this bank started its Islamic activities and operations in Egypt in the last quarter of 2007 after it acquired the National Bank for Development (NBD). The NBD was founded in June 1980 as a commercial bank. It has 70 branches working all over the country. However, the nature of its transactions was not Islamic. It started its Islamic operations in 2007 after the acquisition by the ADIB. That is why; this bank was excluded from the sample of study because it doesn't have any financial reports under the Islamic flag before 2007. Faisal Islamic bank of Egypt (FIBE) was founded in 1976 as a part of the banking empire built by Saudi Prince Mohamed Al-Faisal. It operates around 31 branches all over Egypt. Al-Baraka bank of Egypt commenced its activities in accordance with Shariah principles over 23 years ago and has grown as an Islamic institution to become one of the foremost in the Egyptian market. It has currently around 26 branches and 4 foreign exchange offices spread across major Egyptian cities.

Concerning the sample of conventional banks, the researcher chose a sample of banks that are commercial, private and listed in the Egyptian stock exchange so that they can match the characteristics of the two Islamic banks included in the study and also to make sure that they are all subject to the same rules and regulations of listing in the stock exchange. The sample of conventional banks is composed of 9 commercial banks.

The period covered is 9 years from 2002-2010. The researcher's initial aim was to cover 15 years-period, however, due to the shortage in data availability and documentation and in addition lack of access and time constraints and major political turbulences and instability, the researcher was forced to diminish the period of the research to 9 years.

Generally, difficulty in obtaining data is common in third world countries; these difficulties in obtaining data in third world countries hamper efforts of serious research in those economies (Eljelly and Elobeed, 2013).

## **5.6 Supporting Research Hypotheses**

Zikmund (1994) defined the term hypothesis as an unproven proposition or possible solution to a problem that asserts probable answers to research questions.

The objective of this research is divided into three main parts derived from the definition of the research problem and the research questions:

1. To make a comparative study between the performance of Islamic banks and conventional banks in Egypt.
2. To determine the contingent factors which affect the performance of Islamic banks in Egypt.
3. To draw a conclusion on whether there is a difference between the contingent factors that affect the Islamic banks' performance and those that affect the performance of conventional banks given the fact that they both operate within the same regulatory and legislative environment.

### **5.6.1 First Hypothesis**

The first part of the research is concerned with checking the validity of the argument concerning the performance of Islamic banks being better than that of conventional banks. The researcher chose to use the application of CAMEL rating system to evaluate the financial strengths and soundness of Islamic banks in comparison to conventional banks. The CAMEL rating system is explained in details in section (5.9). The criteria for performance comparison of Islamic and conventional banks under



CAMEL ratings include capital adequacy, quality of assets, management standards, earnings and liquidity maintenance. This argument can be investigated by developing the following hypothesis:

***H1: The performance of conventional banks is better than the performance of Islamic banks.***

In order to be able to test this hypothesis using the CAMEL rating system, this hypothesis is split into five sub-hypotheses:

***H1a: Capital adequacy of Islamic banks differs significantly from capital adequacy of conventional banks.***

***H1b: Quality of assets of Islamic banks differs significantly from quality of assets of conventional banks.***

***H1c: Quality of management of Islamic banks differs significantly from quality of management of conventional banks.***

***H1d: Earnings of Islamic banks differ significantly from earnings of conventional banks.***

***H1e: Liquidity of Islamic banks differs significantly from liquidity of conventional banks.***

### **5.6.2 Second Hypothesis**

The second part of the study is concerned with determining the main contingent factors (external and internal) that affect the performance of Islamic banks in Egypt. This argument is tested by formulating the following hypothesis:

***H2: There is a relationship between the external and internal contingency variables and the performance of Islamic banks in Egypt.***

In order to test this hypothesis, the researcher selected three factors to measure their effect on performance. These selected factors, based on the preceding work in the area of the study as discussed in the literature review chapter, are used to test for their

expected contingent effect on the performance of the Islamic banks. The reasoning behind the choice and the nature of the relationship between the variables is provided in details in a section (5.9.2). The selected factors are: the organizational attributes, the organizational strategy, and the societal or environmental factors. According to the existing literature on the contingency theory and the financial determinants of performance, the previous hypothesis is split into the following sub-hypotheses each related to the measurement of the external and internal contingent factors.

#### **5.6.2.1 Organizational Attributes**

Based on the literature, the researcher chose to measure the effect of the organizational attributes on performance using two variables which are: risk and size. Accordingly, the sub-hypotheses are formulated as follows:

*H2a: There is a relationship between risk and the Islamic banks performance.*

*H2b: There is a relationship between size and the Islamic banks performance.*

#### **5.6.2.2 Business Strategy**

When discussing the main financial and operational strategies by banks, the essential concern is about the fund sources and uses along with the leverage and liquidity levels. Consequently, the sub-hypotheses are formulated as follows:

*H2c: There is a relationship between the fund sources management and the Islamic banks performance.*

*H2d: There is a relationship between the fund uses management and the Islamic banks performance.*

*H2e: There is a relationship between the leverage level and the Islamic banks performance.*

*H2f: There is a relationship between liquidity and the Islamic banks performance.*

### **5.6.2.3 Societal or Environmental Factors**

To measure the effects of Islamic banks' organizational attributes and strategies on performance, it is necessary to control for other environmental or societal factors that have been proposed in the literature as possible determinants of performance. Two sets of variables are expected to be external to the bank; the macroeconomic environment, and the regulations and supervision indicators. Considering those control variables, the following sub-hypotheses are developed:

*H2g: There is a relationship between the macroeconomics variables and the Islamic banks performance.*

*H2h: There is a relationship between the banks regulations and supervisions and the Islamic banks performance.*

### **5.6.3 Third Hypothesis**

The third part of the study is concerned with differentiating between the contingent factors that affect the Islamic banks' performance and those that affect the performance of conventional banks given the fact that they both work in Egypt and under the same rules and regulations. This issue is addressed by developing the following hypothesis:

*H3: There is a difference between the contingent factors that affect the performance of Egyptian Islamic banks and those that affect the performance of Egyptian conventional banks.*

## **5.7 Methods of Analysis**

Statistics is a field within mathematics that involves the summary and analysis of data. It is divided into two general areas; descriptive statistics and inferential statistics. Descriptive statistics is a branch of statistics in which data are only used for descriptive purposes and are not employed to make predictions. It consists of methods and procedures for presenting and summarizing data. While inferential statistics are employed to derive conclusions or make predictions. Normally in inferential statistics,

sample data are employed to draw inferences about one or more populations from which the samples have been derived (Sheskin, 2003).

### **5.7.1 Parametric and Non-Parametric Statistics**

In order to use parametric statistics, certain assumptions must be satisfied in the data (Bryman and Cramer, 2001; Pallant, 2001; Field, 2000). Those assumptions are:

- The observations must be independent.
- The observations must be drawn from normally distributed populations.
- The variables must have equal or homogeneous variances.
- The scale of measurement should be in the form of interval or ratio scaling.
- The underlying distribution of scores in the population from which the sample has been randomly drawn is normal.
- The means of these normal and homoscedastic populations must be linear combinations of effects due to columns and/or rows.
- Observations are independent.
- Variables under study have underlying continuity.

Parametric tests require that data of the sample chosen from the population to be normally distributed, whereas the nonparametric tests do not (Anderson et al, 2013). If these assumptions are not fulfilled, then non-parametric statistics could be used. The non-parametric tests are also called distribution-free tests. If data are normally distributed then statistical inference becomes more robust and makes the statistical significance of the relationship between variables more accurate (Easa 2012; Jason and Waters, 2002). Miller et al (1997) argued that when the sample is normally distributed the statistical power of non-parametric tests will be less than the corresponding parametric tests and consequently a type II error is more likely to be committed.

The non-parametric techniques tend to be not as powerful as parametric ones because they may be less sensitive in detecting a relationship or a difference among groups (Pallant, 2001).

## **5.7.2 Statistical Analysis Methods**

Therefore, different statistical techniques will be used in this research. The first analytical technique is the descriptive analysis which will be conducted to describe the characteristics of the two groups of banks under study (Norusis, 2000; Bowen and Starr, 1982; Connolly and Sluckin, 1971). Thus, the descriptive statistics would be used to describe the current situations of the Egyptian Islamic and conventional banks and to provide some answers concerning the performance of these banks. Finally, association analysis will be followed to assist in improving our understanding of the investigated phenomenon i.e. correlation analysis, regression analysis and t-tests will be performed.

### **5.7.2.1 Descriptive Statistics**

It is a branch of the statistical discipline that is concerned with developing and utilizing techniques for the effective presentation of numerical information so as to highlight patterns otherwise hidden in a data set. It includes statistical procedures used to organize, summarize and describe the data we are studying (Kohler, 1994). The data could be collected from either a sample or a population. Descriptive statistics include mathematical quantities such as mean, median, mode, standard deviation, variance, range of scores, skewness and kurtosis that summarize and interpret some of the properties of a set of data (sample) but don't not infer the properties of the population from which the sample was drawn (Cohen and Holliday, 1996).

### **5.7.2.2 T-Test**

The t-test is used to test a hypothesis stating that the mean scores on some variables will be significantly different for two independent samples or groups. It is basically used when the number of observations (the sample size) is small and the population standard deviation is unknown. It can be used to determine if two sets of data are significantly different from each other and is most commonly applied when the test statistic would follow a normal distribution if the value of a scaling term, in the test statistic, were unknown (Zikmund, 1994).

### 5.7.2.3 Regression Analysis

It is used to explore the relationship between dependent and independent variables. It allows for the simultaneous investigation of the effect of two or more independent variables on a single dependent variable. The analysis will be conducted repeatedly as many dependent variables as there are (Pallant, 2001; Zikmund; 1994).

In this research, the hypotheses will be tested using multiple regression analysis with the Ordinary Least Square model (OLS). OLS refers to the technique used in achieving a line of best fit, such that the sum of the squared deviation of all the distances from this line is minimized. It helps to explain variations in a variable known as the dependent variable by examining the changes in a series of independent or explanatory variables while also capturing the unpredictable elements of the measurements. In other words, the OLS allows the systematic component of variation in the variable of concern to be captured as well as the estimate of the random or stochastic element of the variation. The nature of the investigation along with the data availability imposed the choice of multiple regression using OLS. Many other regression alternatives could have been used like binary logistic or probit regression; however, it would not have been appropriate for this type of investigation. Concerning the logistic regression, it applies maximum likelihood estimation by transforming the dependent variable into a logit variable which is the natural log of the odds of the dependent occurring or not. Although the OLS and the logistic regression, they both relates the changes in the log odd to the independent variables, yet the logistic regression finds the changes in the log odd of the dependent variables and not the changes in the variables themselves (Adelopo, 2010; Maddala, 2001).

Moreover, the assumptions of normality and homoscedasticity are violated since normality is not possible with two values 1 and 0 and variances is not going to be equal and they will most probably be low at both extreme ends of the regression line but will be high in the middle violating the assumptions of constant variance across the whole regression line (Wooldridge, 2000). For the same reasoning the probit regression is not applied.

The regression analysis determines how variation in one variable relates to variation in another variable, and what is the shape of the relation between the two variables (Sekaran and Bougie, 2010; Cooper and Schindler, 2003). Each independent variable is weighted by the regression analysis. These weights (called the regression coefficients) indicate the relative contribution of the independent variables to the overall prediction chain so as to facilitate the interpretation of the contribution of each variable in making the prediction (Easa, 2012; Hair et al, 2010). The sign of the coefficient (+/-) shows that the predicted value of the dependent variable increases/decreases when the value of the independent variable increases/decreases.

Since the main aim of this research is to discover and explain the relationships between the dependent and independent variables rather than to predict these relationships, the regression models, in this research, are used to explain and describe the behavior of dependent variables rather than to make any predictions. The output of the regression model includes the following terms:

1. Multiple R: measures the influence of the set of independent variables on the dependent variable.
2.  $R^2$  (also called the coefficient of determination): shows the percentage change in the dependent variable due to a change in the independent variables.
3. P-value (significance of independent variables): provides the significance of each independent variable individually (should be less than 0.05 to be considered significant).
4. Significance of F: signals the significance of the whole model. If F is less than 0.05, so the regression is significant at 95% confidence level.
5. Beta: is a classification of the independent variables according to their influence on the dependent variable.
6.  $B$ : is the unstandardized regression coefficient which predicts the amount and direction of change in the dependent variable due to a unit change in the independent variable.

The linear regression method estimates the coefficients of the linear equation, which may include one or more independent variables. The nature of the research implies the use of the multiple regression analysis as there are many independent variables in the

study. The type of the multiple regression used in this research study is the stepwise method that is used to fit a model for performance measurements. In its basic form, the regression equation is expressed as follows:

$$y_{it} = a + bx_{it} + \epsilon_{it}$$

Where:

(y) is the dependent variable.

(x) is the independent variable.

(a) is the intercept on the y axis and it is the constant number in the equation.

(b) is the slope of the regression line and it is the coefficient assigned to each independent variable during the regression.

(i) and (t) are indices for banks and time.

( $\epsilon_{it}$ ) is the standard error of estimates.

To judge the significance of the model, two values can be used; ( $R^2$ ) which is the square of the correlation coefficient, it is known as the sample coefficient of multiple determination and it is used when the model is needed in future forecasts; and (F) which is the value used to interpret and explain the relationships between variables and therefore, it is considered the main value to test the significance of the model in this research (Tantawi, 2007; Cooper and Schindler, 2003; Gupta, 2000; Kohler, 1994).

Hair et al (2010) mentioned that the most commonly used measure of predictive accuracy for the regression model is the value of the coefficient of determination or  $R^2$  or adjusted  $R^2$ . The  $R^2$  indicates the proportion of the variance in the dependent variable which is accounted for by the independent variables.

To judge whether or not the whole model is significant, the general F-test is used. If significance is  $\leq 0.05$ , then the model is significant and there exists a significant relationship between the dependent variable and the independent variables, and consequently, these variables should be taken into consideration. On the other hand, if



the significance is  $\geq 0.05$ , then the results are not significant and should not be taken into consideration (Hair et al, 2010; Field, 2009; Adams et al, 2007).

It is important to clarify one critical topic before the application of multiple regression analysis; namely: the assumptions underlying the multiple regression analysis.

- **Checking the Methodological Assumptions**

The researcher will use the least square method to check whether or not the conditions essential for applying the regression model are satisfied or not. Such a check is of importance because serious violations of the assumptions can call into question all the conclusions drawn from a regression analysis (Easa, 2012; Kohler, 1994). The assumptions are: normality of residuals, linearity, homoscedasticity, multicollinearity and autocorrelation.

In the following part, the researcher will properly present the testing of the regression assumptions for both samples of Islamic banks and conventional banks.

**Normality:** The first assumption is concerned with the normality of errors. The term normality means that the residuals (as an error measurement) should be normally distributed with a mean of zero and constant variance. Tabachnick and Fidell (2007) argued that statistical inference becomes less and less robust as distributions depart from normality. The normality assumption is checked by inspecting the histogram of the residuals. There should be almost a straight line, not a curve (almost); the residuals should have a straight line relationship with predicted dependent variable values (Easa, 2012). By inspecting the residuals scatter plot and the normal probability plot of the regression standardized residuals for the two samples (Islamic and conventional banks), it was obvious that all points are lying in a reasonably straight diagonal line from bottom left to top right. Consequently, this diagram suggests that there is no major deviation from normality.

**Linearity:** The second assumption is concerned with the linearity. It means that the relationship between the dependent and independent variables should be linear. This assumption can be tested with the help of a residuals plot where the residuals are verified against predicted values. If the linearity assumption holds, one expects the dots

to lie in a broad band around the horizontal line in a roughly rectangular distribution. Otherwise, there would be possible curvilinear relationships among the variables, which, in turn, suggest fitting the data to a nonlinear equation. By scanning the residuals plot, there is no clear or systematic pattern to the residuals and there is a significant linear relationship for both samples.

***Homoscedasticity:*** The third assumption is concerned with equal variances of the residuals. The assumption is concerned with the variances of the residuals being constant. If the variances of the residuals are not constant, this implies a case of heteroscedasticity. If the variances are unequal, then the relative reliability of each observation is unequal and leads to inefficient estimates of the coefficients. The larger the variance, the lower should be the importance or the weight attached to that observation. The heteroscedasticity is tested in this study by checking the residuals plot. If the residuals are scattered around the zero in random patterns, then the variance of the error term is constant. It can also be checked by drawing the residuals versus each of the independent variables, these graphs would indicate the independent variable (s) that cause heteroscedasticity. The residuals plot examined show no sign of heteroscedasticity, and consequently, it is assumed that the variance of the error term is constant and there is no violation of this assumption in both samples.

***Autocorrelation:*** The fourth assumption of regression analysis deals with the statistical independence of different sample observations concerning the dependent variable. If this assumption is fulfilled, then, the associated residuals will be statistically independent as well. Several techniques exist for detecting the autocorrelation problem; yet, most common, however, is the use of the Durbin Watson test. The value of the Durbin Watson varies between 0 and 4; where a value of 2 indicates absence of autocorrelation and independence of residuals. If the value of the Durbin Watson test is less than or greater than 2, then the residuals are autocorrelated. After checking the results of the Durbin Watson test, it can be concluded that there is no autocorrelation between the data. All the significance 2-tailed values for the whole model are around the value of 2; therefore, the assumption of the residuals' independence is accepted and it can be said there is no evidence of autocorrelation. The results of the Durbin Watson test are shown along with the results of the regression analysis.

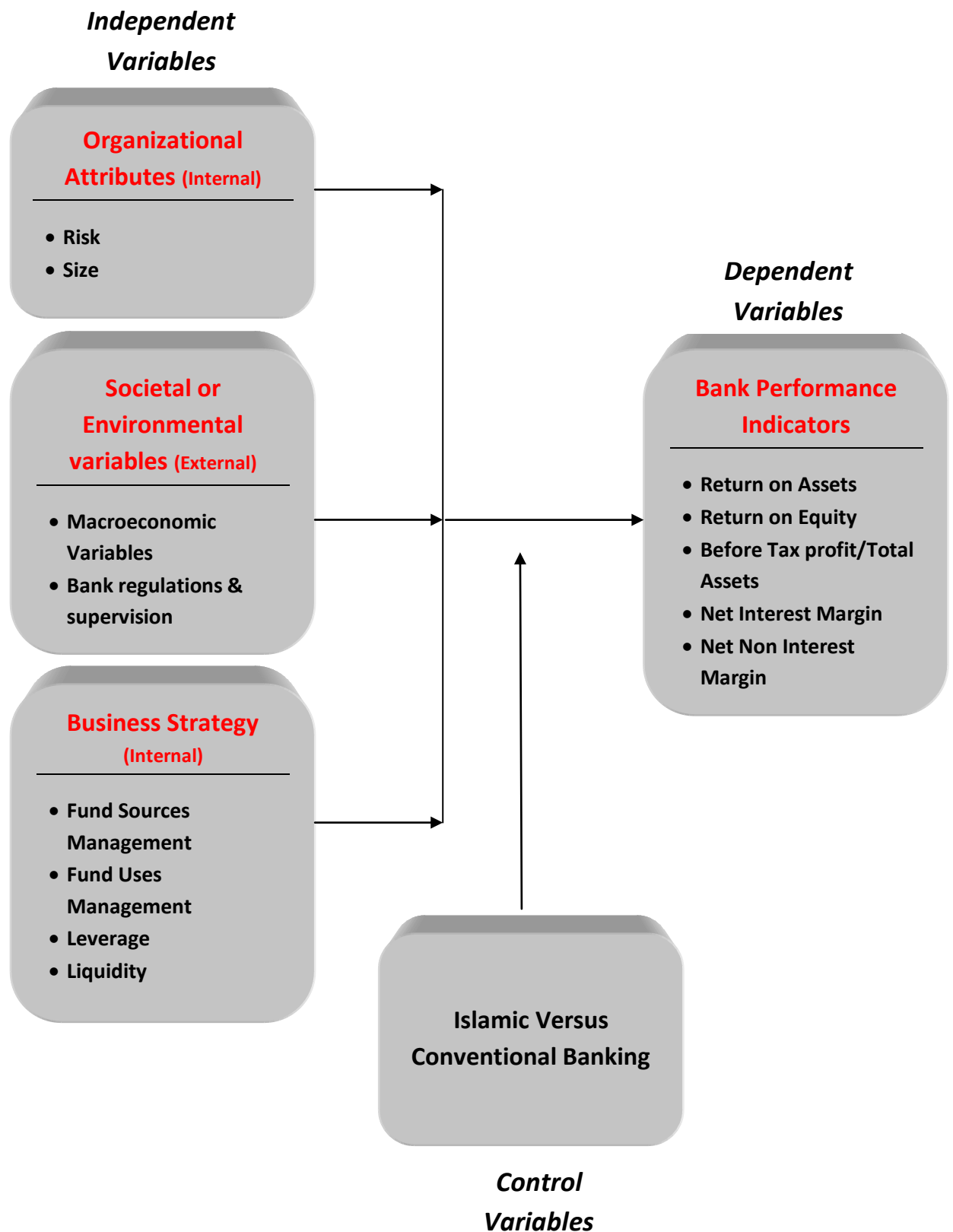
***Multicollinearity:*** Multicollinearity is a problem of high correlation between or among independent variables. Tests of multicollinearity are performed to assure independence of variables. The multicollinearity problem could be detected from the Variance Inflation Factor (VIF). If the value of the VIF is  $< 10$ , then this indicates that there is no multicollinearity. After checking the VIF of the model, all values in the VIF column was less than 10 and thus it can be concluded that there is no multicollinearity between the variables included in the model. The VIF column will be shown in the tables containing the final results of the regression analysis.

## **5.8 Research Theoretical Framework**

Inspired by the work of Schweikart (1985) in developing a financial accounting contingency model and of Thomas (1991) in applying the contingency theory in corporate financial reporting, the researcher developed the theoretical framework for the study as shown in figure (5.5). In this study, the researcher is measuring the effect of internal and external factors on the Egyptian Islamic banks performance and whether there is a difference between their influence on the Islamic banks and on the conventional banks performing in Egypt according to the nature of their operations.

Khandwalla (1977) argued that the contingency theorists give a great deal of weight to the interface between the organization and its environment. That is why the researcher intends to incorporate the effect of both internal and external factors to test their effects on the performance of banks in the study.

**Figure (5.5): Research Theoretical Framework**



Many studies tested the effect of internal and external variables (Elhamma, 2013; Al-Eqab and Ismail, 2011; Crandall and Crandall, 2010; Gerdin, 2005; Gerhardy, 2003; Nahm and Vonderembse, 2002; Donaldson, 2000; Langfield-Smith, 1997; Matthews and Scott, 1997; Rayburn and Rayburn, 1991; Thomas, 1991; Zeithaml et al., 1988; Jauch and Kraft, 1986; Schweikart, 1985; Govindarajan, 1984; Hirst, 1981; Otley, 1980; Waterhouse and Tiessen, 1978; Khandwalla, 1972 and 1973).

This research is conducted in Egypt, which is an Arab developing country located in the middle-east, where environmental uncertainty stems from economic, legislative and political fluctuations. In addition, this study is conducted on the banking industry in Egypt, a very dynamic, challenging and competitive sector affecting the whole, financial and monetary stability of the Egyptian economy. Therefore, the researcher considers both the internal and the external contingency factors in the study to investigate their likely effects as determinants of performance of Egyptian Islamic banks. The study theoretical framework is presented in figure (5.5).

The research framework drawn is an adaptation of the previously mentioned frameworks (section 4.7) conducted in the field of organization theory, corporate financial reporting and financial accounting (Thomas, 1991; Schweikart, 1985; Otley, 1980) whereby the researcher intends to assess the effect of the external and internal contingent factors on the performance of Islamic and conventional banks performing in Egypt.

## **5.9 Measurement of Research Variables**

Since both shareholders and depositors in Islamic banks are the residual claimants to the bank's profits, bank profitability is the designated measure of bank performance. In this research, the dependent variable that is used to measure performance is the financial measure which is the most common type used to measure performance.

This research's main focus is divided into two parts. First part is concerned with discovering the differences in performance between Islamic and conventional banks given that the two types of banks are working under the same conditions. This part of

the study will be tackled from five main angles which are: profitability, asset quality, capital position, operations and liquidity. Second part is concerned about investigating the likely contingent factors that affect the performance of the Egyptian Islamic banks in comparison to the Egyptian conventional banks to discover whether the nature of their operations would affect these contingencies. The main variables of the study are: the organizational attributes, the organizational strategies and the environmental or societal factors.

As it was argued in Lee and Yang (2011), the most comprehensive approach to develop an innovative but yet simple performance measurement plan is to include both financial and non-financial performance measures as well as explaining the cause and effect relationships between the various measures (Kaplan and Norton, 2001; Ittner and Larcker, 1998b; Otley, 1995). However, in this research, the researcher is going to depend mainly on the financial performance measures for the reasons previously mentioned in the literature review chapter in section (3.4).

As mentioned above, first part of the analysis is concerned with comparing the performance of Islamic banks and conventional banks. This comparison is performed through the use of t-tests in order to be able to compare the means of the two samples of banks; Islamic banks and conventional banks; to discover if there is a difference between the average performances of the two groups. The variables used to make the comparison of Islamic and conventional banks are: the profitability measures, the asset quality, the capital position, the operations and liquidity.

The variables used to measure the banks' performance are chosen based on the CAMEL framework. The CAMEL is a rating system that is generally used by the governmental authorities, regulating bodies controlling the commercial banks i.e. central banks and other non-governmental policy research centers for the purpose of assessing the performance of a financial institution and the soundness of its financial position (Kabir and Dey, 2012; Hassan and Bashir, 2003). In 1979, the Uniform Financial Institutions Rating System introduced the CAMEL framework. It was adopted as a standardized framework for the examination process to develop a rating system whereby the most critical components of a financial institution's overall safety and soundness could be identified and quantified. The CAMEL rating has become a concise and indispensable

tool for examiners and regulators. It is commonly referred to by the acronym of its component parts. The evaluation factors that comprise an institution's CAMEL rating are: Capital Adequacy, Asset Quality, Management Quality, Earning Ability and Liquidity (Barr et al, 2002; Siems and Barr, 1998).

While in the second part of the study, the researcher will select some the external and internal contingencies as the dependent variables to see their effect on banks' performance and result to a conclusion about the factors that affect the performance of Islamic and conventional banks. Those variables are mentioned in the following section.

In the following section, the researcher will discuss the research variables in details along with their measurement.

### **5.9.1 Dependent Variables**

The dependent variables used in this study to measure the performance of banks are the profitability ratios namely; return on assets (ROA), return on equity (ROE), before tax profit/total assets (BTP/TA), net interest margin (NIM) and net non interest margin (NNIM). The profitability financial ratios are the most common measures of financial performance used in the literature (Sharma and Ravichandran, 2013; Hanif et al., 2012; Wahidudin et al., 2012; Al-Tamimi, 2010; Haron, 2004; Hassan and Bashir, 2003).

### **5.9.2 Independent Variables**

The independent variables used in this research are to be classified into internal variables and external variables. The internal variables are the organizational attributes and the business strategy while the external variables are the environmental and the societal variables.

#### **5.9.2.1 Organizational Attributes (Risk and Size)**

Thomas (1991) argued that there is some conceptual confusion in the contingency theory literature concerning the distinction between environmental variables and organizational attributes. And since it is not the purpose of this research to differentiate between the two variables and offer a solution to this problem, the organizational

attributes are conceptualized in terms of the resources available to an enterprise and the way in which these are organized. This includes organizational risk and size.

In the literature conducted on the contingency theory, size is seen as one of the elements of the organization's context or attribute that has been investigated as a determinant for organizational structure (Franco-Santos and Bourne, 2005). Size is considered as one of the most important organizational attributes. Organization size can be conceptualized and measured in different ways such as number of employees, sales turnover, net asset value/capital employed, total assets of the organizations.

There is a substantial body of research studying the effect of size on organizations structure and performance (Anbar and Alper, 2011; Bashir, 1999; Thomas' 1991; Merchant, 1981; Blau and Schoenherr, 1971).

Thomas (1986) made a study on the adoption of the contingency approach in corporate financial reporting and his results showed that certain measurement practices are primarily influenced by company size.

He also mentioned in his study in 1991 that one of the important organizational attributes is gearing or leverage. The researcher in this study is going to use this attribute as a measurement of risk (Thomas, 1991).

#### **5.9.2.2 Business Strategy (Fund Uses and Sources Management, Leverage and Liquidity)**

The accounting literature takes strategy as given and examines the linkage and association between strategic choices and the organization's performance. Many studies typically measure strategy as a continuum among organizations following a "defender", "harvest", or "cost leadership" strategy and firms following a "prospector", "build", or "innovation" strategy (Youssef, 2007; Dent, 1990). Therefore, business strategy has been identified as relevant to explain cross-sectional variation in the design of management control systems (Youssef, 2007; Langfield-Smith, 1997).

The literature on performance measurement systems emphasizes the existence of a linkage between strategies and performance measures, which in turn aims at providing



integrated approaches to linking operations with strategy and objectives in order to achieve the goals of the organization working in a competitive environment (Chenhall, 2008; Ittner et al, 2003; Kaplan and Norton, 2001).

The word strategy has many different meanings. Anthony (1965) defined the word strategy as the pattern of objectives, purposes or goals and the major policies and plans adopted for achieving these goals. According to Porter's typology, an organization can maximize its performance either by adopting a cost strategy that differentiates the organization as the lowest cost in the industry or by differentiating its products or services' quality from those of other competitors (Elhamma, 2013). Therefore, the business strategy is considered one of the important independent factors that the researcher is incorporating in this study.

Otley (1980) argued that business strategy is an important factor that affects the main characteristics of accounting information system design. While Chong and Chong (1997) suggested that business strategy would determine its environmental context which in turn influence the scope of accounting information required to deal with the environmental uncertainty.

According to Hongbo and Fangfang (2010), performance appraisal is business-strategy-oriented. Different strategies will cause changes in performance measures. Consequently, different business strategies lead to different composition of indicators and the different distribution of weighting, which will lead to changes in bank performance.

The strategy contingency differs from other contingency variables in that it is not an element of content only but rather the tools and means by which managers can influence the nature of the external environment and the technologies of organizations (Chenhall, 2003).

Theoretically, organizations use certain business strategies to improve their business performance (Fisher, 1998). In this research, the effect of the strategy variable is decomposed into four sub-measures to test its effect on the banks' performance in details. Due to the very distinguished nature of the Islamic and conventional banks as

financial institutions, the strategy contingency is measured with the following variables which are: the uses of funds, sources of funds, capital quality, and liquidity.

#### **5.9.2.3 Societal or Environmental Factors (Macroeconomic Indicators, Laws and Regulation)**

Societal variables consist of those factors to which all enterprises within a particular country are subject to and which vary between nations (Thomas, 1991). The American Accounting Association (AAA) contingency model indicates the importance of environmental factors as influences upon accounting practices, yet it does not offer a method of indentifying and classifying such factors. In 1995, Gernon and Wallace suggested that the contingency theory offers a systematic approach toward the conceptualization of the national and foreign environmental variables which may have a significant bearing on the similarities and differences in accounting styles and practices. They added that the conceptualization has provided inspiration for empirical research concerned with determining the environmental causes and effects of accounting (Gerhardy, 2003). Lawrence and Lorsch (1967) stated that the determinants of effective internal organizational processes are dependent upon variations in the environment where the organization operates. Thus, a simple extension of Lawrence and Lorsch's 1967 model suggests that the choice of accounting and disclosure practices (hence, the reported financial performance) is the result of an internal decision which is influenced by external contingencies.

#### **5.9.3 Control Variables**

The control variables used in this research will be the nature of the banking system whether it is conventional banking system or Islamic banking system. The goal behind using this variable will be to discover whether the nature of the operations will have any contingent effect on the determinants of profitability in both types of banks or not.

### **5.10 Conclusion**

This chapter presented the methodology and various methods that are adopted in this research. It started with highlighting the ontology, epistemology and the research

paradigms used. Also, it described the data collection and the sample chosen. Lastly, there was a detailed description of the research questions, research hypotheses and the research variables along with a depicting of the research theoretical contingency-based framework. It is worth mentioning that the research strategy adopted is a deductive strategy since the researcher has no intention to generate a new theory and because the deductive approach better serves in the achievement of the research goals by revising an existing theory which is the contingency theory. Moreover, the researcher is using the functionalist paradigm. This paradigm generates regulative sociology in its most fully developed form. This approach is often problem-oriented and very much concerned with providing practical solutions to real existing problems and this is to a large extent the aim of the researcher. This paradigm best matches the realism ontological assumption and the positivistic epistemology. This view is very much in consistence with the researcher's belief that the choice of the methodologies to be employed in this research should be guided by the problem of the research at hand and the resources available and the data collection method used to solve the problem.

## **Chapter Six**

### **Data Analysis and Discussion of Results**

#### **6.1 Introduction**

In the previous chapter, the research methodology used for the analysis was explained and justified. The seventh chapter describes the statistical analysis procedures followed in this research, whether the descriptive or the inferential analysis. In addition, the results of the research from analyzing the data obtained from the financial reports are presented.

The first part of the chapter consists of a brief description of the sample and the banks included in the analysis. After that, T-Test results are shown to make the comparison between the two types of banks included in the analysis so an answer could be reached to the first research question.

Afterwards, there will be a description of the assumptions tested to perform the Ordinary Least Square analysis. Five methodological assumptions are checked; namely: normality, linearity, homoskedasticity, autocorrelation and multicollinearity.

Finally, the results of the regression analysis are discussed in order to be able to observe the nature of each of these variables as well as studying the relationships among the variables of the study and unveil the complicated nature of the relationships among various variables.

The population under study is analyzed using Statistical Program in the Social Science (SPSS) package - one of the most famous statistical packages - to be able to study the differences between Islamic and conventional banks in Egypt. Also, some models will be fitted to get a conclusion about the determinants of profitability in both Islamic and conventional banks.

#### **6.2 Descriptive Statistics**

This part presents the output of the descriptive statistics performed on the Islamic banking and conventional banking samples. Table (6.1) presents a summary for the

descriptive statistics for the independent variables for Islamic banks while table (6.2) presents a summary for the descriptive statistics for the independent variables for conventional banks.

In the descriptive statistics tables, there is a presentation for the mean, median, mode and standard deviations for the independent variables for Islamic and conventional banks.

### **6.3 The Paired Sample t-test**

Many studies predicted the bright future of Islamic banks and recorded that the performance of Islamic banks outperformed that of conventional banks (Hanif et al, 2011; Jaffer and Manarvi, 2011; Awan, 2009; Rosly and Abu Bakar, 2003; Iqbal, 2001). The literature review chapter presented many studies that made a comparison between the performance of Islamic banks and a control group of conventional banks and it has been evaluated using both trend and ratio analysis. Generally, Islamic banks have done fairly well in comparison to conventional banks and the results showed that Islamic banks performed better in possessing adequate capital and a better liquidity position in comparison to conventional banks.

However, Fayed (2013) conducted a study on the Egyptian market during the period from 2008-2010 and concluded that the performance of the conventional banks, in general, was better than that of Islamic banks. She mentioned that Islamic banks still have a long way to go. In addition, Mouawad (2009) claimed that the Islamic banks in Egypt exhibited a very low impact in pouring extra savings in the economy in comparison to conventional banks; she argued that the total Islamic share in deposits and savings in Egypt accounts only for 5% in the period from 2006 to 2009. Moreover, Kazarian (1993) and Mohieldin (1997), they both criticized the policies of the Islamic financial institutions in Egypt along with the governmental policies, which ended up benefiting the situation of the conventional banks, and left the Islamic financial institutions suffering from inefficient allocation of funds.

**Table (6.1): Descriptive Statistics for Independent Variables of Islamic Banks**

<b>Variable Description</b>	<b>Mean</b>	<b>Standard deviation</b>	<b>Minimum</b>	<b>Maximum</b>
CSTF/TA	59.4572	11.03618	25.59	68.31
TD/TA	89.9283	1.88544	86.58	93.12
OH/TA	.8650	.21457	.62	1.30
NIEA/TA	80.8906	20.83562	55.46	100.00
EQ/TA	5.4022	1.47289	2.97	8.93
TLO/TA	60.2072	18.37914	28.57	88.17
CCE/TA	11.4350	7.97281	4.79	37.80
TL/TA	94.5978	1.47289	91.07	97.03
PLOL/TLO	9.4883	4.32966	6.36	21.29
GDPPC	121.6667	22.28690	100.00	159.00
RIR	3.5544	3.76958	-.08	11.16
IR	9.3933	5.25440	2.40	17.32
GDPGR	5.1000	1.56356	3.10	7.20
GDP	124.2222	64.58151	27.00	224.00
SIZE	217.3333	115.90107	100.00	492.00
REQRESR	14.0000	.00000	14.00	14.00
CORTXR	26.6667	9.70143	20.00	40.00

**Table (6.2): Descriptive Statistics for Independent Variables of Conventional Banks**

<b>Variable Description</b>	<b>Mean</b>	<b>Standard deviation</b>	<b>Minimum</b>	<b>Maximum</b>
CSTF/TA	55.9385	20.55003	.00	80.54
TD/TA	73.3984	25.06617	.00	94.10
OH/TA	1.5081	.73593	.00	3.01
NIEA/TA	12.3232	5.61170	.00	28.78
EQ/TA	9.4381	5.23880	.00	23.22
TLO/TA	42.4417	18.22506	.00	67.61
CCE/TA	14.0354	9.70472	.00	50.08
TL/TA	80.5325	27.16045	.00	96.63
PLOL/TLO	15.0880	16.73028	.00	100.00
GDPPC	119.1605	28.78301	.00	159.00
RIR	5.8248	15.73382	-.08	103.00
IR	9.5401	5.04426	2.40	17.32
GDPGR	5.0914	1.54234	2.40	7.20
GDP	121.7074	65.86726	3.10	224.00
SIZE	216.7160	550.04125	-10.00	2603.00
REQRESR	14.0000	.00000	14.00	14.00
CORTXR	26.6667	9.48683	20.00	40.00

The comparison of performance between Islamic banks and their conventional counterparts was performed in different studies using different research techniques. However, the most prominent and comprehensive one is the CAMEL test standards factors (Jaffer and Manarvi, 2011; Hassan and Bashir, 2003). This system will enable the researcher to evaluate the financial strengths and soundness of Islamic banks in comparison to conventional banks. As previously mentioned in section (5.9), the criteria for comparison between the performance of Islamic banks and the conventional banks under CAMEL ratings include capital adequacy, quality of assets, management performance, earnings and liquidity measures. By performing this comparison the researcher will be able to answer the first research question. In addition, it is worth mentioning that the average size of the sample of the two Islamic banks is almost equal to the average size of the sample chosen of conventional banks where size is measured in terms of total assets. This in turn will facilitate the comparison.

Statistical tests are used to carefully examine prior activities so as to be able to use these analyses to make informed predictions about future activities. Regardless of the statistical tests, data are examined in a systematic manner so that decisions can be made with some degree of certainty.

The researcher to determine if two sets of data are significantly different from each other will use a T-Test. It may be used for independent samples, called “Independent Samples T-Test” or used for paired sampled, called “Paired Samples T-Test”, depending on the type of data. In the current research, the paired samples T-Test will be used to determine whether there is a significant difference between the average values of the same measurement made for Islamic and Conventional banks. The null hypothesis is that the difference in the mean values is zero. The null hypothesis for the paired sample t-test is  $H_0: d = \mu_1 - \mu_2 = 0$ . Where  $d$  is the mean value of the difference. The null hypothesis is tested against one of the following alternative hypotheses, depending on the question posed:  $H_1: d = 0$ ;  $H_1: d > 0$  or  $H_1 < 0$ .

The paired sample t-test is used to examine the first hypothesis and its sub-hypotheses

***H1a: Capital adequacy of conventional banks differs significantly from capital adequacy of Islamic banks.***



Usually, better performing banks have larger capital adequacy ratio except for subordinated debt over capital funds. This ratio indicates the percentage of total capital provided in form of subordinated debts; the lower this ratio the better. Results in table (6.3) indicate rejecting the null hypothesis and accepting the alternative hypothesis. At 95% confidence level, there exists a significant difference between the capital adequacy of Islamic banks and conventional banks. The ratios show that the capital adequacy of conventional banks is significantly better than its counterpart at Islamic banks. Conventional banks are leading in the following ratio: equity to total assets, equity to net loans, equity to customer and short-term funding, equity to liabilities, capital funds to total assets, capital funds to net loans, capital funds to customer and short-term funding and capital funds to liabilities.

This indicates that conventional banks are more proficient than Islamic banks in absorbing loan losses in Egypt and in reducing the financial risk. As Samad (2004) asserts high capital adequacy ratios will aid the bank in providing a strong cushion against unanticipated credit risks. The results of this research are consistent with the results of Fayed (2013) and Jaffar and Manarvi (2011) but inconsistent with most of the literature which asserts that Islamic banks have better capital adequacy ratios than conventional banks like Al-Gazzar (2014), Madvari (2012) and Javaid et al (2011) whose studies found that Islamic banks are better in maintaining better capital adequacy ratios.

### ***Researcher Conclusion***

Therefore, the researcher concludes that the sub-hypothesis 1 is accepted as it is supported by the results of the statistical analysis which proves that there is a difference between the performance of Islamic banks and the performance of conventional banks concerning their capital adequacy. The results are in favor of conventional banks which show better ratios than Islamic banks. Consequently, the conventional banks have stronger financial strength and viability in terms of capital. It can also be inferred from the results that conventional banks have better management in understanding and manipulating any shock jeopardizing the financial capability of the banks during times of risk.

**Table (6.3): T-Test for Differences between Islamic and Conventional Banks-  
Capital Adequacy**

	Levene's Test for equality of variances		T-test for equality of Means				
	F	Sig	t	Sig (P- Val)	Mean difference	95% confidence interval of the difference	
						Lower	Upper
<b>Capital</b>							
EQ / TA	5.563	.024	-5.103	0.000	-5.87601	-8.20931	-3.54270
EQ/NLO	7.094	.011	-4.132	0.000	-15.91707	-23.72145	-8.11268
EQ/CSTF	3.455	.071	-3.601	0.001	-10.28111	-16.06636	-4.49587
EQ/TL	6.343	.016	-4.610	0.000	-7.28255	-10.48343	-4.08168
CF/TA	3.837	.058	-2.950	0.005	-3.55799	-6.00176	-1.11422
CF/NLO	10.605	.002	-2.987	0.005	-10.14465	-17.02543	-3.26386
CF/CSTF	2.185	.148	-2.146	0.039	-6.14639	-11.95059	-.34218
CF/TL	4.581	.039	-2.843	0.007	-4.55878	-7.80748	-1.31007
SD/CF	1.026	.318	1.224	0.229	4.54095	-2.97323	12.05513

***H1b: Quality of assets of conventional banks differs significantly from quality of assets of Islamic banks.***

Since high performing banks tend to restrain their credit risk, they tend to have lower loan-loss provision ratios. Poor asset quality indicators are perceived to cause capital erosion and increase credit and capital risks (Hassan and Bashir, 2003). The quality of assets depends to a large extent on the quality of credit evaluation, monitoring and collection procedures within each bank. Results in table (6.4) indicate accepting the null

hypothesis and rejecting the alternative hypothesis. At 95% confidence level, there is no proven significant difference between the assets quality of Islamic banks and conventional banks. The ratios show that the assets quality of conventional banks is not significantly better than its counterpart at Islamic banks.

**Table (6.4): T-Test for differences between Islamic and Conventional Banks - Asset Quality**

	Levene's Test for equality of variances		T-test for equality of Means				
	F	Sig	t	Sig (P-Val)	Mean difference	95% confidence interval of the difference	
						Lower	Upper
Asset Quality							
PLOL/TLO	.599	.444	1.188	.242	.49519	-.34905	1.33943
PLOL/NIR	.709	.405	1.888	.067	6.11446	-.44714	12.67605
PLOL / ILO	.952	.336	.597	.554	89.34764	-213.98024	392.67551
ILO/TLO	3.174	.083	-.023	.982	-.01389	-1.22744	1.19967
NCO/TLO	.174	.679	-1.622	.113	-.57340	-1.28962	.14282
NCO/NIBPLOL	.104	.749	-.925	.361	-8.50957	-27.14034	10.12121
LOLR/ILO	1.005	.323	-.405	.688	-3346.890	-20087.46997	13393.68894

The result of this research corresponds with the results of Rozzani and Rahman (2013) which concluded that asset quality for both modes of banking was almost the same and also with the results of Merchant (2012), Ansari and Rehman (2011) and Jaffer and Manavri (2011). While in Fayed (2013) and Alkassim (2005), the results showed superiority of conventional banks' quality of assets over Islamic banks. While the study of Al-Gazzar (2014) shows that the quality of assets of Islamic banks is better than

conventional banks same as the studies of Hanif et al (2011), Awan (2009), and Hassan and Bashir (2003).

### ***Researcher Conclusion***

Hence, the researcher reached a conclusion that the sub-hypothesis 2 is rejected as there is no evidence from the statistical analysis that shows any difference between the quality of assets of Islamic banks and the quality of assets of conventional banks operating in Egypt. This result could be due to the strong supervision of the central bank of Egypt over banks and requesting the submission of monthly financial statements by banks to closely monitor the banks' performance in order to make sure they are adopting sound banking practices and financial stability.

### ***H1c: Quality of management of conventional banks differs significantly from quality of management of Islamic banks.***

Normally, better performing banks have larger operations ratios and better quality of management. Except for the cost to income ratio, the lower is this ratio the better. Results in table (6.5) indicate partially accepting the alternative hypothesis and partially rejecting the null hypothesis. At 95% confidence level, there is a significant partial difference between the operations of Islamic banks and conventional banks. The results show that the following ratios are significantly higher and better in conventional banks than Islamic banks: net interest revenue to average assets, other operating income to average assets, return on average assets, return on average equity and income net of distribution to average equity. On the other hand, the following ratios are significantly higher and better in Islamic banks than conventional banks: non-interest expenses to average assets, pre-tax operating income to average assets and non-operating items to net income. Concerning the cost to income ratio, it is significantly lower for conventional banks and consequently this is an indicator of a better performance.

These results are consistent with, Merchant (2012), Jaffer and Manarvi (2011), Safiullah (2010) and Hassan and Bashir (2003); while differ from Al-Gazzar (2014), Wasiuzzaman and Gunasegavan (2013), Siraj and Pillai (2012), Ansari and Rehman

(2011) and Iqbal (2001) which proved that the operations of Islamic banks are better than those of conventional banks.

**Table (6.5): T-Test for differences between Islamic and Conventional Banks-  
Management (Operations ratios)**

	Levene's Test for equality of variances		T-test for equality of Means				
	F	Sig	t	Sig (P- Val)	Mean difference	95% confidence interval of the difference	
						Lower	Upper
<b>Operations</b>							
NIR/AGGA	.247	.622	-2.612	0.013	-1.21829	-2.16351	-.27306
OOI/AVGA	4.074	.051	-2.146	0.039	-0.13062	-.25398	-.00727
NIE/AVGA	3.605	.065	8.206	0.000	4.83087	3.63806	6.02368
PTOI/AVGA	3.922	.055	-11.841	0.000	4.15821	-4.86975	-3.44666
NOIT/AVGA	1.522	.225	.422	0.676	0.10467	-.39814	.60749
ROAA	27.199	.000	-5.192	0.000	-1.30962	-1.82073	-.79851
ROAE	2.397	.130	-2.818	0.008	-8.34959	-14.35293	-2.34625
INOD/AVGE	2.397	.130	-2.818	0.008	-8.34959	-14.35293	-2.34625
NOI/NI	26.218	.000	2.635	0.013	1195.3873	273.32225	2117.45240
CTIR	30.072	.000	2.538	0.016	797.12097	158.92493	1435.31701
REP	14.299	.001	-1.672	0.103	-1.09622	-2.42461	.23217

### ***Researcher Conclusion***

Accordingly, the researcher concludes from the above results that the sub-hypothesis 3 is accepted based on the statistical results reached. There is a difference

between the performance of Islamic banks and the performance of conventional banks concerning the operational ratios and the quality of management. It can be deduced from these ratios that conventional banks' management are better able to manage their assets and generate revenues from it and control of costs. It follows that conventional banks are more efficient in managing to get more deposits from trustworthy and financially strong depositors and reduce the risk of defaults by borrowers by granting loans to creditworthy customers.

***H1d: Earnings of conventional banks differ significantly from earnings of Islamic banks.***

It is generally known that the higher the earnings and profitability ratios the better the performance is. Results in table (6.6) indicate accepting the alternative hypothesis and rejecting the null hypothesis. At 95% confidence level, there is a significant difference between the earnings of Islamic banks and conventional banks. The ratios show that the net non-interest margin and the net interest margin ratios are significantly higher in conventional banks than Islamic banks. This result shows that the profitability of conventional banks is better than the profitability of Islamic banks. The result of this research goes with the results of many previous studies like the ones performed by Fayed (2013), Hanif et al (2012) and Samad and Hassan (1999), while it differs from Al-Gazzar (2014), Rozzani et al (2012), Usman and Khan (2012), Safiullah (2010), Hassan (2005) and Iqbal (2001).

### ***Researcher Conclusion***

Consequently, the researcher concludes that the sub-hypothesis 4 is partially supported by the results of the analysis as the difference exists in only two ratios which are NIM and the NNIM while the other ratios show no significant difference between conventional and Islamic banks in Egypt. The results of this part prove that conventional banks' profitability is higher than the profitability of Islamic banks. This result is proved as well by the ratio of cost to income ratio analyzed in the sub hypothesis of operating efficiency which proves that management of conventional banks pioneer in cost control and revenues generation than the management of Islamic banks in Egypt.

**Table (6.6): T-Test for differences between Islamic and Conventional Banks-  
Earnings ratios**

	Levene's Test for equality of variances		T-test for equality of Means				
	F	Sig	t	Sig (P- Val)	Mean difference	95% confidence interval of the difference	
						Lower	Upper
<b>Earnings</b>							
ROA	9.191	.003	-1.606	0.111	-0.63907	-1.42862	.15048
ROE	2.414	.124	.014	0.989	0.08840	-12.45211	12.62890
BTP/TA	7.850	.006	-1.453	0.149	-0.67710	-1.60200	.24780
NNIM	5.957	.016	-3.634	0.000	-8.76302	-13.54946	-3.97659
NIM	7.692	.007	-2.048	0.043	-1.03451	-2.03725	-.03176

***H1e: Liquidity of conventional banks differs significantly from liquidity of Islamic banks.***

Mostly, liquidity is not a major problem for sound banks working in a reasonably competitive banking system. However, liquidity can change rapidly and consequently, requiring frequent updates of relevant indicators. Results in table (6.7) indicate accepting the alternative hypothesis and rejecting the null hypothesis. At 95% confidence level, there is a significant difference between the liquidity of Islamic banks and conventional banks. The ratios show that the net loans to total assets and the net loans to customer and short term funding are significantly higher in Islamic banks than conventional banks. The results of this researcher are compatible with the results of Al-Gazzar (2014), Fayed (2013) and Hanif et al (2012), and contradict with the results of Rozzani and Rahman (2013) and Haron and Abdul Rahman (2012).

### ***Researcher Conclusion***

As a consequence, the researcher concludes that the sub-hypothesis 5 is supported by the results of the statistical analysis. The liquidity of the conventional banks differ from the liquidity of the Islamic banks in favor of the conventional banks which showed a lower ratio level and hence a better liquidity position and less risk to face liquidity squeezes or defaults.

**Table (6.7): T-Test for differences between Islamic and Conventional banks-  
Liquidity ratios**

	Levene's Test for equality of variances		T-test for equality of Means				
	F	Sig	t	Sig (P- Val)	Mean difference	95% confidence interval of the difference	
						Lower	Upper
<b>Liquidity</b>							
INTBR	7.128	.011	1.191	0.241	838.88989	-588.86041	2266.64019
NLO/TA	16.578	.000	2.498	0.017	10.36019	1.95537	18.76501
NLO/CSTF	9.426	.004	2.314	0.026	18.69117	2.32740	35.05494
NLO/TDB	14.727	.000	1.321	0.195	5.98821	-3.19524	15.17165
LIQA/CSTF	1.113	.298	.100	0.921	1.62609	-31.18189	34.43407
LIQA/TDB	.313	.579	-1.959	0.058	-11.94212	-24.29254	.40830



**The previous results are observed as they all have a large t-value and a very small significant value ( $P\text{-value} < 0.05$ ), with respect to the 2-tailed. This means that the variables previously mentioned differ in Islamic banks than in Conventional banks.**

### ***Conclusion***

The first part of the analysis was about testing the first hypothesis. The paired sample t-test was used to compare the performance of the two Islamic banks working in Egypt along with a sample of nine conventional banks listed in the Egyptian stock exchange during the period 2002–2010. The researcher attempted in this part of the study to deepen the understanding of the financial soundness indicators that are more relevant for the analysis of the financial stability in the Egyptian economy. To facilitate the comparison, the sample of the commercial banks and Islamic banks are similar in size, where size is measured in terms of total assets. The comparison of the financial measures expressed in terms of the CAMEL financial ratios indicates the superiority of Egyptian conventional banks over Islamic ones in capital adequacy, quality of management, earnings and liquidity. While the findings indicate no significant difference exists among the two groups of banks concerning the quality of assets. The findings are summarized in table (6.8).

The findings show that the Egyptian experience in Islamic banking is considered a deviation from the theoretical framework of Islamic finance and a clear aberration from its objectives.

**Table (6.8): Summary of the Results for the First Hypothesis Tested**

<b>Hypothesis #</b>	<b>Hypothesis</b>	<b>Conclusion</b>	<b>comments</b>
H1	<i>The performance of conventional banks is better than the performance of Islamic banks in Egypt.</i>	Supported	Conventional banks performance differs from Islamic banks. Conventional banks are dominating in most of the ratios.
H1a	<i>Capital adequacy of conventional banks differs significantly from capital adequacy of Islamic banks</i>	Supported	Conventional banks are leading in EQ/TA, EQ/NL, EQ/CSTF, EQ/LIAB, CAPF/TA, CAPF/NL, CAPF/CSTF, CAPF/LIAB
H1b	<i>Quality of assets of conventional banks differs significantly from quality of assets of Islamic banks</i>	Not supported	No significant difference between the performance of conventional banks and Islamic banks.
H1c	<i>Quality of management of conventional banks differs significantly from quality of management of Islamic banks.</i>	Supported	Conventional banks are leading in NIR/AA, OOPI/AA, ROAA, ROAE, INOD/AE, while Islamic banks are leading in NIE/AA, PTOPI/AA, NOI/NI
H1d	<i>Earnings of conventional banks differ significantly from earnings of Islamic banks.</i>	Supported	Conventional banks are leading in NNIM, NIM
H1e	<i>Liquidity of conventional banks differs significantly from liquidity of Islamic bank</i>	Supported	Conventional banks are leading in NL/TA, NL/CSTF

From the above analysis, it can be clearly stated that the performance of the Egyptian conventional banks shows supremacy and dominance over the performance of the Egyptian Islamic banks and this is due to the flaws that exist in the Egyptian banking regulations that favor and encourage the conventional banking theme more than the

Islamic one. As Kazarian mentioned in his study (1993, p.285): “One wonders what is Islamic about Islamic banks in Egypt other than their Islamic terminology”. He argued that Islamic banks in Egypt; namely Faisal and Al-Baraka banks use round about methods to perform the traditional banking practices.

The gap between the practical results of this study and the theoretical foundations could be a result of the shortage of experts in Islamic banking and the absence of Islamic accounting and auditing standards amongst other reasons that will be mentioned in details at the end of this chapter.

## **6.4 The Regression Analysis**

In this section, the researcher will formulate the model used to examine the relationship between the performance of Islamic banks and the set of internal and external contingencies that influence their performance. Since the ultimate objective of management is to maximize the value of the shareholders’ equity, an optimal combination of risk and return should be pursued in order to increase the profitability of the bank (Hassan and Bashir, 2003). Accordingly, a comprehensive framework should be developed in order to identify the objectives, goals, structure and strategies. This framework should encompass both the internal and external variables.

Consequently, the second research question will be answered through the performance of the multiple regression analysis.

### **6.4.1 Regression Analysis for Islamic Banks**

In order to be able to identify the determinants of profitability in Islamic banks and be able to pinpoint the contingent factors that affect the Islamic banks’ performance, the researcher will perform a regression analysis. The results of the regression analysis performed in this part will be used to answer the second research question related to identifying the determinants of performance and recognizing which contingency factors are to be taken into consideration by key and relevant individuals when taking decisions concerning Islamic banks.

In this section, there will be a presentation for the results of the regression analysis performed on the sample of Egyptian Islamic banks. The regression analysis is performed five times, each time it will use one of the five profitability measures as the dependent variable. The profitability measures are: ROA, ROE, before tax profit/total assets (BTP/TA), net interest margin (NIM) and net non interest margin (NNIM).

The first model is using the ROA as the dependent variable. The first sub-hypothesis is formulated as follows:

***H2a: There is a significant relationship between ROA and the internal and external contingencies of Islamic banks.***

Table (6.9) presents the descriptive statistics for the ROA variable of Islamic banks.

**Table (6.9): Descriptive Statistics for the ROA**

Variable Description	Mean	Standard deviation	Minimum	Maximum
ROA	.3439	.36516	.00	1.07

The ROA is calculated by dividing the profit after tax by total assets. It shows how a bank can convert its assets into earnings. The higher the value of this ratio, the higher the capability of the firm will be. This ratio is considered an indicator for evaluating managerial efficiency (AlMahfuz, 2012; Samad and Hassan, 2000; Samad, 1999)

Table (6.10) presents a model summary and the coefficients of regression for the final results of the regression after many test-runs were performed to ensure that there is neither autocorrelation nor multicollinearity in the final model of the regression.

When the ROA is used as the dependent variable in the analysis, the regression result shows an  $R^2$  of approximately 62.3% and adjusted  $R^2$  of 54.2%. This result indicates that the model specified explained 62.3% of the variation in the ROA. When the profitability measure ROA is used as the dependent variable in the stepwise regression model,  $R^2$  started by 86.6% and then changed with the many test-runs till it reached 62.3%. Despite the fact that there is a relatively large change in the  $R^2$  value, yet,

checking the significance of the model shows that it is much better to accept this change to obtain a significant model that is also free of multicollinearity and autocorrelation.

By checking the value of the Durbin Watson test, it can be noticed that it has a value of 2.684. Though the value of the Durbin Watson is a bit far from 2, however, still it is less than 3. By linking this value to the multicollinearity statistics and by checking the VIF column, it becomes very obvious that the VIF values are 1.811, 1.090 and 1.885. It is noticeable that all the values are less than 5 which imply the absence of any multicollinearity or any autocorrelation in the model that is likely to adversely affect the regression results. Gupta (2000) argued that there is no bias in the results if there is a problem of normality and autocorrelation as long as multicollinearity and heteroscedasticity conditions are satisfied in the regression analysis. All the previously mentioned facts show that the model has a reasonable explanatory power for the relationship between the dependent and the independent variables proven significant.

It can be drawn from table (6.10) that the significance values of the variables are 0.004, 0.033 and 0.021 and the t values are 3.463, -2.371 and 2.611 respectively for the variables NIEA/TA, GDP and SIZE respectively. The beta coefficients for those variables are 0.765, -0.406 and 0.588. As shown by the results of the final model, many variables were omitted from the model because they were found insignificant and only three variables were found significant. It was found that, the ROA of Egyptian Islamic banks is positively affected by the amount of total assets of the bank (SIZE) and by the value of the non-interest earning assets to total assets (NIEA/TA) which is one of the fund uses management measure. It can also be concluded that the ROA of the Egyptian Islamic banks is negatively affected by GDP. Accordingly, the regression equation could be expressed as follows:

$$\text{ROA} = -0.858 + 0.013 * \text{NIEA/TA} - 0.002 * \text{GDP} + 0.002 * \text{SIZE}$$

The above equation shows that the Islamic banks' ROA is affected positively by the size of their total assets which is a measuring ratio of the organizational attributes as a contingency. Also, there is a positive relationship between Egyptian Islamic banks' ROA and NIEA/TA which is a measure of how the bank is managing its uses of funds and consequently, how the business strategy as an internal contingency affects the

performance of the Islamic banks. The ambiguous relationship is between the effects of GDP over Islamic banks' ROA which is notably negative. This suggests that the macroeconomic indicators or the environment as an external contingent factor affects negatively the performance of the Egyptian Islamic banks.

Moreover, as depicted in table (6.10), the overall results for the regression model were significant at P-value = .003 (less than .05), and F statistics value of 7.719. These results mean that the regression model is true and the results are statistically significant.

**Table (6.10): ROA Model Summary and Coefficients**

Variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity statistics	
	B	Std. error	Beta			Tolerance	VIF
Constant	-.858	.480		-1.786	.096		
NIEA/TA	.013	.004	.765	3.463	.004	.552	1.811
GDP	-.002	.001	-.406	-2.371	.033	.918	1.090
SIZE	.002	.001	.588	2.611	.021	.530	1.885
Multiple R	.789						
R <sup>2</sup>	.623						
Adjusted R <sup>2</sup>	.542						
Std error	.24699						
F statistics	7.719						
Significance	.003						
Durbin Watson	2.684						

NIEA/TA has a positive relationship with ROA. It measures how much the non-interest earning assets represent out of the total assets. This ratio is used a proxy for fund uses management. The higher the NIEA/TA is; the higher the ROA. In calculating this ratio,

the researcher excluded those assets that generate return to Islamic banks like Murabahah, Mudarabah and Musharakah. This ratio reflects the business strategy adopted by Islamic banks in managing the uses of their funds. The result of this relationship proves that the business strategy as one of the internal contingencies adopted by Islamic banks affects their performance and profitability significantly. This result is supported by Bashir (2003), while different from Wahidudin et al (2012) and Hassan and Bashir (2003).

Also, a positive relationship exists between SIZE as one of the organizational attributes of Islamic banks and the performance of Islamic banks. If the bank size is considered as an internal determinant as the case with this research, the management of the bank can be responsible for expanding their organization by acquiring additional assets and liabilities. On the other hand, other researchers consider SIZE as an external and uncontrollable variable by the bank as the case with Bourke (1989) and Short (1979). Banks which are large in size are expected to promote economies of scale and reduce the cost of gathering and processing information (Naceur, 2003; Boyd and Runkle, 1993). Large banks are more capable of providing wide variety of financial services to their customers and consequently, have more ability to mobilize funds (Bashir, 1999).

The result of this study is consistent with many precedent studies in the literature like Abduh and Idress (2013), Srairi (2009), Athanasaglou et al (2005), and Haron (2004), unlike other studies which found negative relationship like Sufian and Habibullah (2009) and Bashir (2000). Other studies found insignificant positive relationship which signals that size has no influence on banks' profitability like Bukair (2013), and Wasiuzzaman and Tarmizi (2010).

The controversial result found in this study is in the relationship unveiled between GDP and Islamic banks profitability. Almost all the previous studies found either a positive relationship between GDP or GDP growth and Islamic banks' performance or found no relationship or effect of GDP on the profitability of Islamic banks. On the contrary, a study by Sufian and Parman (2009) found a negative relationship between profitability of banks and economic growth. In this study, the researcher discovered that there is a negative effect of GDP on Egyptian Islamic banks' profitability and this implies that there is a negative effect of the macroeconomic indicator GDP.

### ***Researcher Conclusion***

It can be concluded from the above analysis that; the ROA, as a measure of performance of Egyptian Islamic banks, is affected by only two variables positively which are; the NIEA/TA and SIZE and is affected negatively by GDP. All other contingent factors were excluded from the regression model. Hence, the three determinants of ROA in Islamic banks are organizational attributes, business strategy and macroeconomics variables.

Organizational attributes as one of the internal contingencies has a significant effect on ROA and is measured by SIZE. This result supports the literature concerning the fact that large banks are more profitable and are more able to use economies of scale and reduce cost and increase revenue. Consequently, it can be concluded that Islamic banks benefit from its large size and economies of scale which affects its profitability levels positively.

Islamic banks' business strategy has also a significant effect on ROA represented in the fund uses management ratio NIEA/TA. Hence it can be concluded that Islamic banks are positively affected by the internal contingency factor measured by the ratio of NIEA/TA. This result indicates that when the management of Islamic banks in Egypt adopts a policy of increasing its non-interest earning assets level, this consequently increases its profitability level.

Finally, ROA is negatively affected by the macroeconomics indicator (GDP). As one of the external contingencies, GDP affects negatively the performance of Islamic banks in Egypt. This result can be explained by the concept of interest rate duration which states that short term investments are more sensitive to changes in interest rates than medium and long-term investments. Furthermore, it is commonly known that Islamic banks in general depends heavily on short term investments (in the form of Murabahah) because long term investments (Musharakah and Mudarabah) are more risky and require equity sharing not granting loans like in the case of conventional banks. Moreover, when the GDP level in any country is high, the economy is characterized by high investment levels and lower interest rates, and due to the duration concept, people prefer to invest in conventional banks to benefit from the low interest rates and because Islamic banks



don't prefer to make investments for long term periods and eventually their profitability levels are affected negatively.

From the above argument, it can be deduced that the hypothesis is partially accepted as there is positive relationship between ROA as one of the performance measures and the business strategy as an internal contingency. Also, there is a positive relationship between ROA and Islamic banks' organizational attributes as an internal contingency. Lastly, there is a negative relationship between ROA and macroeconomic indicators as an external contingency. Hence, it can be hypothesized that the determinants of ROA as one of the profitability measures are organizational attributes, the business strategy and macroeconomic variables as well.

The second Sub-Hypothesis is formulated as follows:

***H2b: There is a significant relationship between ROE and the internal and external contingencies.***

In order to test the second sub-hypothesis, the second regression model will use the ROE as the dependent variable. Table (6.11) presents the descriptive statistics for the ROE variable of Islamic banks.

**Table (6.11): Descriptive Statistics for the ROE**

<b>Variable Description</b>	<b>Mean</b>	<b>Standard deviation</b>	<b>Minimum</b>	<b>Maximum</b>
ROE	6.9122	7.28671	.00	22.21

The ROE is calculated by dividing the profit after tax by equity capital. It is a general measure for bank profitability. It reflects the ability of the bank to achieve return on its equity sources of fund to generate profits. The higher the value of this ratio, the higher the financial performance will be. It is also considered an indicator for managerial efficiency. In fact, the ROE is the most important measurement of banking returns because it is affected by how well the bank has performed on all other return categories,

and it also indicates whether a bank can compete for private sources in the economy (Bashir, 1999).

When considering the ROE as the dependent variable in the stepwise regression analysis, it was found that  $R^2$  is equal to 49% and the adjusted  $R^2$  reached 38.1%. It is also of essential importance to mention that the final regression model came after many trials and many test-runs that were performed to reach a significant model. During these trials the  $R^2$  dropped from 84.6% to 49%. This decrease in the value of  $R^2$  is justified by an increase in the model significance. Moreover, the researcher's concern about asserting the autocorrelation and the multicollinearity assumptions, made it inevitable to reject many significant models with slightly high values of autocorrelation and multicollinearity (though within the limits known). The value of the Durbin Watson test is equal to 2.107 which is almost close to 2. In addition, the results in table (6.12) show that the VIF value is equals to 1.811 which is less than 2 for the solely significant independent variable, therefore, the autocorrelation and the multicollinearity problem between these variables were not marked and the results of the regression are considered meaningful.

Moreover, as is shown in table (6.12), the F-value is equal to 5.986 and the significance value of the regression model is .006 (less than .05). These results mean that the regression model is true and the results are statistically significant.

The final regression model has excluded all variables that were considered insignificant except one variable (NIEA/TA) that has a P-value of 0.011, a t value equals to 2.907 and a beta coefficient equals to 0.747. Accordingly, the regression equation can be expressed as follows:

$$\text{ROE} = -15.406 + 0.261 * \text{NIEA/TA}$$

The regression equation expresses clearly that there is a positive relationship between the Egyptian Islamic banks' ROE and the ratio of non interest earning assets to total assets. This positive relationship implies that good management of funds' uses affects positively the ROE of the Egyptian Islamic banks which in turn signals that the business

strategy contingency of the Islamic banks affects positively the performance of the banks. The result of this research corresponds to the results of Bashir (2003).

**Table (6.12): ROE Model Summary and Coefficients**

variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity statistics	
	B	Std.	Beta			Tolerance	VIF
Constant	-15.406	11.147		-1.382	.189		
NIEA/TA	.261	.090	.747	2.907	.011	.552	1.811
Multiple R	.700						
R <sup>2</sup>	.490						
Adjusted R <sup>2</sup>	.381						
Std error	5.73248						
F statistics	5.986						
Significance	.006						
Durbin Watson	2.107						

This result supports strongly the results of the previous model which showed a positive effect of the same variable on ROA. This can be considered as strong evidence to the importance of the Islamic banks adopting solid and strong business strategies to increase their earnings from the non-interest assets and consequently affect their profitability levels positively.

### ***Researcher Conclusion***

Bank loans are expected to be the main source of revenues, since they are the basic and most important asset in any bank and are expected to impact profits positively. However, since most of the Islamic banks' loans are in the form of profit and loss sharing accounts (loans with equity features), the loan-performance relationship

depends significantly on the expected business strategy adopted by the Islamic banks to manage their assets. It can be concluded from the above analysis that, the ROE, as a measure of performance of Egyptian Islamic banks, is affected by only one variable positively which is the NIEA/TA supporting the previous result in the research which is the adoption of the Islamic banks in Egypt a strategy that focuses on increasing their non-interest earning assets level.

From the above argument, it can be inferred that the hypothesis is partially accepted as there is positive relationship between ROE as one of the performance measures and the NIEA/TA as one of the measures of the business strategy adopted by Islamic banks. Hence, it can be hypothesized that the determinant of ROE as one of the profitability measures is the business strategy.

The third sub-hypothesis is formulated as follows:

***H2c: There is a significant relationship between BTP/TA and the internal and external contingencies.***

In order to test the third sub-hypothesis, the third model will use the BTP/TA as the dependent variable. Table (6.13) presents the descriptive statistics for the BTP/TA variable of Islamic banks.

**Table (6.13): Descriptive Statistics for the BTP/TA**

<b>Variable Description</b>	<b>Mean</b>	<b>Standard deviation</b>	<b>Minimum</b>	<b>Maximum</b>
BTP/TA	.3606	.42556	-.14	1.31

Many studies used the BTP/TA as a measure of banks' profitability. It is a measure of the bank's profit margin. This measure reflects the bank's ability to generate higher profits by diversifying their portfolios (Bashir, 2003; Hassan and Bashir, 2002). As was mentioned in Bashir (2003), the ratio of BTP/TA demonstrates the management's ability to generate positive returns on deposits and captures the bank's ability to reduce the risk of solvency because if banks were able to engage in successful non-loan

activities and offer new services, non-interest income will increase overtime (Madura, 2000). The BTP/TA ratio was used as a rough proxy for bank efficiency by Goldberg and Rai (1996). When considering the BTP/TA as the dependent variable, and by applying the backward stepwise method, it was found that  $R^2$  started by 87.6% and then decreased till it reached the value of 68.7%. Though the amount of decrease in the value of  $R^2$  is large, yet it was found by the researcher that it is much better to accept this change as it results in a significant and true regression model.

**Table (6.14): BTP/TA Model Summary and Coefficients**

Variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity statistics	
	B	Std.	Beta			Tolerance	VIF
Constant	-1.026	.511		-2.009	.064		
NIEA/TA	.016	.004	.764	3.796	.002	.552	1.811
GDP	-.003	.001	-.452	-2.892	.012	.918	1.090
SIZE	.002	.001	.618	3.008	.009	.530	1.885
Multiple R	.829						
$R^2$	.687						
Adjusted $R^2$	.619						
Std error	.26253						
F statistics	10.223						
Significance	.001						
Durbin Watson	2.829						

The regression equation is expressed as follows:

$$\text{BTP/TA} = -1.026 + 0.016 * \text{NIEA/TA} - 0.003 * \text{GDP} + 0.002 * \text{SIZE}$$

It can be deduced from table (6.14) and the regression equation that, the significance values are 0.002, 0.012 and 0.009 and the t values are 3.796, -2.892 and 3.008 for the effect of NIETA/TA, GDP and SIZE over BTP/TA. The significance values are all less than 0.05; consequently, the model can be considered significant. The beta coefficients are 0.764, -0.452 and 0.618 for NIETA/TA, GDP and SIZE respectively. They all have a positive effect on the bank's performance except the GDP which is negatively related to the BTP/TA.

Moreover, as shown in table (6.14), the overall results for the regression model were significant at P-value = .001 (less than .05), and F statistics value of 10.223. These results mean that the regression model is true and the results are statistically significant.

The researcher was concerned about the relatively high autocorrelation in the model. As it clear in table (6.14), the Durbin Watson value is equal to 2.829. This value is slightly away from the value of 2. However, by checking the VIF column in table (6.14), it has values of 1.811, 1.090 and 1.885 which are all less than 10. Consequently, it can be concluded that since the VIF is much below the threshold of 10 suggested by Hair et al (1998) for evidence of severe multicollinearity, this suggests that multicollinearity is not likely to adversely affect the regression results. As mentioned in Tantawi (2007), Gupta (2000) argued that there is no bias in the results if there is a problem of normality and autocorrelation as long as multicollinearity and heteroscedasticity conditions are satisfied in the regression analysis. Since the present regression model doesn't suffer the multicollinearity problem or heteroscedasticity, it can be concluded that the model is considered significant.

BTP/TA is affected by NIEA/TA, GDP and SIZE. From the analysis, it was found that NIEA/TA and SIZE positively affect BTP/TA while GDP negatively affects BTP/TA. And as argued before, the increase in non-interest earning assets in Islamic banks impacts profitability positively and enhances banks' performance. This result is supported by many previous studies such as Abduh and Idress (2013) and Srairi (2009).

Concerning SIZE, it also has a positive effect on Islamic banks' profitability. As argued before, it is known that large banks will earn a higher profit than smaller banks since

larger banks do enjoy lower and cheaper gathering and processing cost. This result is backed by many previous studies like Idris et al (2013) and Bashir (2003).

The last variable having significant effect on the performance of Egyptian Islamic banks is GDP. It has the same arguable negative effect on BTP/TA. This result is totally opposite to most of the literature. Past studies stress on the importance of economic factors and especially GDP in affecting positively the performance of any financial institution, unlike the result of this research. The outcome of this study contradicts with the studies of Wasiuzzaman and Tarmizi (2010), Heffernan and Fu (2008), Kosmidou et al., (2007), Kosmidou et al., (2006), and Hassan and Bashir (2003). All those studies confirmed that GDP has a strong positive effect on the banks' profitability because favorable macroeconomic environment seems to stimulate higher profits, unlike the case in Egypt.

### ***Researcher Conclusion***

It can be concluded from the above analysis that, BTP/TA, as a measure of performance of Egyptian Islamic banks, is affected by NIEA/TA and SIZE positively and is affected negatively by GDP. No other contingent factors showed any significant effect on profitability in this model. These results support the previous ones that the determinants of BTP/TA in Egyptian Islamic banks are organizational attributes, business strategy and macroeconomics variables.

Organizational attributes as one of the internal contingency factors that is measured by SIZE has a positive effect on BTP/TA and this result corresponds to the fact that large banks generate more profit and benefit from economies of scale and this result is in accordance to the literature. Moreover, Islamic banks' business strategy has also a positive effect on BTP/TA represented in the fund uses management ratio NIEA/TA. This result is considered in accord to the past literature. An increase in this ratio leads to an increase in profitability levels. Hence, it can be concluded that profitability is affected positively by the business strategy as one of the internal contingencies.

Lastly, BTP/TA is negatively affected by the macroeconomics indicator (GDP) indicating that the environmental factors negatively affect performance of Islamic banks

in Egypt. This result could be justified by the interest rate duration concept and the sensitivity of short-term investments to changes in interest rates and their effect on the preferences of investors and Islamic banks.

From the above argument, it can be concluded that the hypothesis is partially accepted as there is positive relationship between BTP/TA as one of the performance measures and the organizational attributes and the business strategy as internal contingencies. Moreover, there is a negative relationship between BTP/TA and societal and environmental factors as an external contingency. Hence, it can be hypothesized that the determinants of BTP/TA as one of the profitability measures are organizational attributes, the business strategy and macroeconomic indicators.

The fourth sub-hypothesis is formulated as follows:

***H2d: There is a significant relationship between NIM and the internal and external contingencies.***

In order to examine the fourth hypothesis, a multiple regression model will be used with the NIM as the dependent variable. Table (6.15) presents the descriptive statistics for NIM variable as a profitability measure for Islamic banks.

**Table (6.15): Descriptive Statistics for the NIM**

<b>Variable Description</b>	<b>Mean</b>	<b>Standard deviation</b>	<b>Minimum</b>	<b>Maximum</b>
NIM	1.9172	1.25908	.04	4.96

The NIM in Islamic banking is calculated in such a way to be comparable to conventional banks. NIM is the difference between net interest revenue and net interest expense and divided by money lent to other banks and net loans. Of course in Islamic banks, net interest revenue is calculated as the net return that accrues to Islamic banks from Mudarabah, Musharakah and Murabahah. While net interest expense is calculated as the net return that accrues on Islamic banks to depositors in the banks.



When considering the NIM as the dependent variable, and by applying the backward stepwise method, it was found that  $R^2$  started by 99.7% and then decreased till it reached the value of 90.3%. In this regression mode, many trials were made in order to reach significant results while ensuring that the model is free from any sign of correlation and multicollinearity. Yet, the amount of decrease in the value of  $R^2$  is not that large. It was found by the researcher that it is much better to accept this change as it results in a significant and true regression model as shown in table (6.16).

The regression equation is expressed as follows:

$$\text{NIM} = 20.142 + 0.032 * \text{GDPPC}$$

It can be inferred from table (6.16) and the regression equation that, only one significant variable affects NIM which is GDPPC with significance value of 0.029. The t value is 2.599 for GDPPC.

**Table (6.16): NIM Model Summary and Coefficients**

variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity statistics	
	B	Std. error	Beta			Tolerance	VIF
Constant	20.142	14.189		1.420	.189		
GDPPC	.032	.012	.575	2.599	.029	.219	4.559
Multiple R	.950						
$R^2$	.903						
Adjusted $R^2$	.818						
Std error	.53773						
F statistics	10.525						
Significance	.001						
Durbin Watson	2.225						

It is clear that the significance value is less than 0.05; consequently, the model can be considered significant. The beta coefficient is 0.575. From the results shown above, it is clear that GDPPC has a significant positive relationship with NIM.

Moreover, as shown in table (6.16), the overall results for the regression model were significant at P-value = .001 (less than .05), and F statistics value of 10.525. These results mean that the regression model is true and the results are statistically significant.

The researcher was concerned about the relatively high autocorrelation in the model. As it mentioned in table (6.16), the Durbin Watson value is equal to 2.225. This value is slightly away from the value of 2. However, by checking the VIF column in table (6.16), it has a value of 4.559 which is far less than 10. Consequently, it can be concluded that since the VIF is much below the threshold of 10 suggested by Hair et al (1998) for evidence of severe multicollinearity, this suggests that multicollinearity is not likely to adversely affect the regression results. Gupta (2000) argued that there is no bias in the results if there is a problem of normality and autocorrelation as long as multicollinearity and heteroscedasticity conditions are satisfied in the regression analysis (Tantawi, 2007). Since the present regression model doesn't suffer the multicollinearity problem or heteroscedasticity, it can be concluded that the model is considered significant.

It can be depicted from the regression model that the model shows a positive relationship between the NIM as a measure of profitability and the GDPPC which is one of the external contingencies used to measure the macroeconomic effect on the profitability of banks. This result suggests that as the GDPPC increases the NIM used as a measure of profitability increases as well. This result is consistent with many of the previous studies like Bukair (2013), Sufian and Habibuallah (2010), Wasiuzzaman and Tarmizi (2010), Pasiouras and Kosmidou (2007) and Wu et al (2007). This result suggests that any increase in the ratio of GDPPC in Egypt will lead to an increase in the NIM of Islamic banks and this consequently will support the development of the Islamic financial industry in Egypt and to the maximization of the profitability levels for Islamic banks.

### ***Researcher Conclusion***

It can be inferred from the above analysis that the NIM as a measure of performance in Islamic banks is significantly related to GDPPC. The NIM is positively influenced by GDPPC. The results reached correspond to the past results of the literature. The NNIM of Islamic banks in Egypt is positively affected by the macroeconomic variable GDDPC which is one of the external contingency factors. This result corresponds with the fact that any increase in the GDPPC results in an increase in the individual financial welfare which is eventually reflected in the profitability of banks

The fifth sub-hypothesis is formulated as follows:

***H2e: There is a significant relationship between NNIM and the internal and external contingencies.***

In order to test the fifth sub-hypothesis, the fifth model will use the NNIM as the dependent variable. Table (6.17) presents the descriptive statistics for the NNIM variable of Islamic banks.

**Table (6.17): Descriptive Statistics for the NNIM**

<b>Variable Description</b>	<b>Mean</b>	<b>Standard deviation</b>	<b>Minimum</b>	<b>Maximum</b>
NNIM	5.1728	4.30876	1.04	13.04

The NNIM is defined as the net income accruing to the bank from non-interest activities including foreign exchange transactions, bank service charges, ATM charges and direct investment divided by non-interest earning assets. The calculation of such ratio is done in such a way to be consistent to conventional banks in order to have reliable results. Madura (2000) argues that if the banks were able to offer new services away from loan activities, the NNIM will increase overtime and will be used as a rough proxy of bank efficiency as suggested by Goldberg and Rai (1996).

**Table (6.18): NNIM Model Summary and Coefficients**

variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity statistics	
	B	Std. error	Beta			Tolerance	VIF
Constant	-57.291	19.442		-2.947	.011		
NIEA/TA	-.166	.018	-.802	-9.056	.000	.369	2.712
TL/TA	.754	.212	.258	3.557	.004	.550	1.818
INFR	.231	.059	.281	3.885	.002	.551	1.814
SIZE	.011	.003	.292	3.285	.006	.365	2.741
Multiple R	.981						
R <sup>2</sup>	.962						
Adjusted R <sup>2</sup>	.951						
Std error	.95492						
F statistics	83.278						
Significance	.000						
Durbin Watson	2.5672						

When considering the NNIM as the dependent variable, and by applying the backward stepwise method, it was found that R<sup>2</sup> started by 98.2% and then decreased till it reached the value of 96.2%. Though the amount of decrease in the value of R<sup>2</sup> is large, yet it was found by the researcher that it is much better to accept this change as it results in a significant and true regression model.

The regression equation is expressed as follows:

$$\text{NNIM} = -57.291 - 0.166 * \text{NIEA/TA} + 0.754 * \text{TL/TA} + 0.231 * \text{INFR} + 0.011 * \text{SIZE}$$

It can be inferred from table (6.18) and the regression equation that, the significance variables are NNIEA/TA, TL/TA, INFR and SIZE and their significance values are 0.000, 0.004, 0.002 and 0.006 respectively. The t values are -9.056, 3.557, 3.885 and 3.285 for those variables.

It is clear that the significance values are all less than 0.05; consequently, the model can be considered significant. The beta coefficients are -0.802, 0.258, 0.281 and 0.292. They all have a positive effect on the bank's performance, except the NIEA/TA variable it has a negative sign

Moreover, as shown in table (6.18), the overall results for the regression model were significant at P-value = .000 (less than .05), and F statistics value of 83.278. These results mean that the regression model is true and the results are statistically significant.

Once more, the researcher was concerned about the relatively high autocorrelation in the model. As it mentioned in table (6.18), the Durbin Watson value is equal to 2.5672. This value is slightly away from the value of 2. However, by checking the VIF column in table (6.18), it has values of 1.818, 1.814 and 2.741 which are far all less than 10. Consequently, it can be concluded that since the VIF is much below the threshold of 10 suggested by Hair et al (1998) for evidence of severe multicollinearity, this suggests that multicollinearity is not likely to adversely affect the regression results. As mentioned in Tantawi (2007), Gupta (2000) argued that there is no bias in the results if there is a problem of normality and autocorrelation as long as multicollinearity and heteroscedasticity conditions are satisfied in the regression analysis. Since the present regression model doesn't suffer the multicollinearity problem or heteroscedasticity, it can be concluded that the model is considered significant.

It can be depicted from the regression model that the results came distinctly different from the past four models. NNIM is negatively affected by the NIEA/TA. This result is awkward taking into consideration the results reached from the previous three regression models. The previous regression results showed a positive impact of this ratio on performance. This result contradicts with most of the literature outcome as stated previously. However, it resembles to the study conducted by Hassan and Bashir (2003) which showed an inverse and statistically significant relationship between

NIEA/TA and NNIM. According to Wahidudin et al (2012), the negative relationship between NIEA/TA and profitability may be interpreted that Islamic banks are having some similar components of conventional banks, and this regression model has revealed this fact.

The second variable affecting performance significantly is TL/TA. TL/TA affects positively the profitability of Islamic banks in Egypt. TL/TA is one of the risk measures. Using this ratio provides a deeper understanding of the risks a bank faces when trying to achieve higher returns. This result is supported by many researches in the literature such as Wasiuzzaman and Tarmizi (2010), Srairi (2009) and Bashir (2003). They all found a significant positive relationship between profitability and exposure to credit risk. Most of the banks' liabilities are composed of deposits which are used to make Musharakah, Mudarabah or Murabahah or to be invested in governmental securities and thus generating revenues to banks. This result coincides with the results of Abduh and Idress (2013), Hassan and Bashir (2003), Naceur (2003), Abreu and Mendez (2002) and Demirgiic,-Kunt and Huizinga (1999). A higher ratio of TL/TA indicates a lower capital ratio or greater leverage. A lower capital ratio may threaten safety and soundness of the banks' financial position. Besides, a lower capital ratio results in less protection to depositors whose bank accounts are not fully insured. However, in Egypt there are strict regulations concerning the capital ratio to protect depositors and provide more insurance against financial distress. Moreover, when a bank chooses to take more capital risk (to the range allowed by regulators), the leverage multiplier and the profitability level will increase (Bashir, 2003).

The result of the TL/TA ratio should agree with the result of the ratio of NIEA/TA in this model since in Islamic banking they both should represent a complementary effect on the profitability of the bank. Yet, in this model, the two ratios have contradictory results; the TL/TA has a positive relationship with profit and this result goes with the results of the past literature while the ratio of NIEA/TA has a negative sign indicating a negative relationship with profit.

The third significant variable is INFR which designates a positive effect of the inflation rate on Islamic banks in Egypt. Inflation rates could be an essential factor in the causation of variations in the profitability of banks (Revell, 1980). High inflation rates

are associated with high interest rates on loans and consequently a positive impact on bank profitability. However, some researchers argue that the effect of inflation rates on profitability could vary according to whether inflation rates are anticipated or not. If inflation rates are anticipated, a positive impact on profitability is expected, since banks will be able to adjust interest rates timely. On the other hand, if inflation rates are not expected they assume a negative effect on profitability since banks may be forced to adjust slowly their interest rates, resulting in faster increase of banks costs than bank revenues (Pasiouras and Kosmidou, 2007 and Athanasoglou et al., 2006). Other studies found a negative relationship between inflation rates and profitability like Sriari (2009) and Naceur (2003). The result of this research corresponds to the results reached by Wasiuzzaman and Tarmizi (2010), Izhar and Asutay (2007), Vong and Chang (2006), Athanasoglou et al (2008), Haron (2004), Bashir (2003), Demirgüç-Kunt and Huizinga (1999), Molyneux and Thornton (1992), and Bourke (1989).

The fourth and last significant variable affecting NNIM is SIZE. And as was found in the results from the previous models, SIZE has a positive effect on profitability. This supports the fact that the bigger the size of the Islamic banks is the higher the profitability and this notion asserts the importance of economies of scale (Naceur, 2003). This result matches the results of Flamini et al (2009), Athanasoglou et al, (2006) and Camilleri (2005).

### ***Researcher Conclusion***

It can be concluded from the above analysis that the NNIM as a measure of performance in Islamic banks is significantly related to NIEA/TA, TL/TA, INFR and SIZE. The NNIM is negatively influenced by NIEA/TA, and positively affected by TL/TA, INFR and SIZE. The results reached correspond to the literature except the one of NIEA/TA. The NNIM of Islamic banks in Egypt is negatively affected by the business strategy of the bank as measured by NIEA/TA as one of the ratios used to measure the fund uses management. Furthermore, the NNIM is positively affected by the organizational attributes of the bank and the macroeconomic variables as one factor of the societal or environmental factors.

The effect of organizational attributes is represented in the positive effects of risk and size. Concerning risk, it is measured by using the ratio of TL/TA. According to the literature, a positive relationship between TL/TA and profitability is normal and expected as an increase in liabilities as a percentage of assets means an increase in the amount of funds available for usage (or return in the case of Islamic banks) and thus generating more revenues and income to the bank. Thus, it can be concluded that Islamic banks in Egypt are affected positively by risk as one of the internal contingency factors.

Moreover, the organizational attributes affect performance through the effect of positive relationship between SIZE and profitability. As was argued several times before, SIZE is an important determinant of performance because large banks can better use economies of scale and achieve higher profitability. From the analysis, it is clear the Islamic banks are positively affected by SIZE as one of the internal contingencies and ultimately leads to an increase in its profitability.

Finally, the effect of macroeconomics variables is very clear in the analysis represented in the positive effect of the inflation rate on the profitability of Islamic banks in Egypt. This result signals the benefiting of Islamic banks from any increase in the inflation rate that consequently leads to an increase in the price of services and return collected from the borrowers and accordingly, the profitability of Egyptian Islamic banks. So it can be concluded that inflation levels as one of the external contingency factors affect the performance of Islamic banks positively.

From the above argument, it can be deduced that the hypothesis is partially accepted as there is positive relationship between NNIM as one of the performance measures and the organizational attributes as an internal contingency. Also, there is a positive relationship between NNIM and Islamic banks' societal and environmental factors as one of the external contingency factors. Lastly, there is a negative relationship between NNIM and Islamic banks' business strategy as an internal contingency. Hence, it can be hypothesized that the determinants of NNIM as one of the profitability measures are organizational attributes, the business strategy and macroeconomic variables. Table (6.19) presents a summary for the results of the second hypothesis.



**Table (6.19): Summary of the Results for the Second Hypothesis Tested**

<b>Hypothesis #</b>	<b>Hypothesis</b>	<b>Conclusion</b>	<b>comments</b>
H2	<i>There is a relationship between the performance of Islamic banks in Egypt and the set of internal and external contingencies.</i>	Supported	There exists a significant relationship between the profitability of Islamic banks and some of the internal and external contingencies.
H2a	<i>There is a significant relationship between ROA and the internal and external contingencies of Islamic banks.</i>	Partially Supported	Significant positive relationship with size (organizational attributes) and NIETA/TA (fund uses management-business strategy). Significant negative relationship with GDP (macroeconomic variables).
H2b	<i>There is a significant relationship between ROE and the internal and external contingencies</i>	Partially Supported	Significant positive relationship with NIETA/TA (fund uses management-business strategy).
H2c	<i>There is a significant relationship between BTP/TA and the internal and external contingencies.</i>	Partially Supported	Significant positive relationship with NIETA/TA (fund uses management-business strategy), and SIZE (organizational attributes). Significant negative relationship with GDP (macroeconomic variables).
H2d	<i>There is a significant relationship between NIM and the internal and external contingencies.</i>	Partially Supported	Significant positive relationship with GDPPC (macroeconomic variables).
H2e	<i>There is a significant relationship between NNIM and the internal and external contingencies.</i>	Partially Supported	Significant positive relationship with SIZE (organizational attributes) and TL/TA (risk-organizational attributes) and INFR (macroeconomic variables). Significant negative relationship with NIETA/TA (fund uses management- business strategy).

#### 6.4.2 Regression analysis for Conventional Banks

In order to answer the third research question, the researcher will study the performance of a sample of Egyptian conventional banks to determine the contingencies that affect their profitability. Afterwards, the researcher will make a comparison with the results to the answers of the second question. Finally, the researcher will be able to present and introduce a comprehensive picture about the success factors of different types of banks in Egypt. The intention is to decide, which among the potential internal and external contingency factors, appears to be important.

The multiple regression analysis will be performed to unveil the determinants of profitability of conventional banks. In this part of the study, the regression analysis is run five times, each time with one of the profitability measures. Five measures of profitability are used as determinants of performance in this part of the research which are: ROA, ROE, before tax profit/total assets (BTP/TA), net interest margin (NIM) and net non interest margin (NNIM).

The first sub-hypothesis is tested as follows:

***H3a: There is a significant relationship between ROA and the internal and external contingencies.***

**Table (6.20): Descriptive Statistics for the ROA**

<b>Variable Description</b>	<b>Mean</b>	<b>Standard deviation</b>	<b>Minimum</b>	<b>Maximum</b>
ROA	.9830	1.67260	-6.31	3.39

The ROA is calculated by dividing the profit after tax by total assets. The higher the value of this ratio, the higher the capability of the firm will be. This ratio is considered an important indicator for how well the efficiency of the management is. The descriptive statistics for ROA is presented in table (6.20).

Table (6.21) presents a model summary and indicates the coefficients of regression for the final results of the regression. Many trials were performed in order to ensure that the

final model does not show any sign of autocorrelation nor multicollinearity that may corrupt the results. The regression table results show an  $R^2$  of approximately 56.7% and adjusted  $R^2$  of 53.1%. This result indicates that the model specified explained 56.7% of the variation in the ROA.

The results presented in the table (6.21) shows that, when the profitability measure ROA is used as the dependent variable in the stepwise regression model, it was found that  $R^2$  started by 62.3% and then changed with the many test-runs till it reached 56.7%. As it can be depicted from the results it can be concluded that the change in the  $R^2$  value is not significantly large. However, the concern about ensuring that the model is free of multicollinearity and autocorrelation led to the acceptance of the model with the  $R^2$  of 56.7%.

By checking the value of the Durbin Watson test, it can be noticed that it has a value of 1.509 which is less than 3. While the multicollinearity statistics shows acceptable values for the VIF columns which are all below 10. The VIF column shows values of 3.211, 2.024, 2.759, 1.620, 2.640 and 1.335. It is noticeable that all the values are less than 5 which imply the absence of any multicollinearity or any autocorrelation in the model that is likely to adversely affect the regression results. All the previously mentioned facts show that the model has a reasonable explanatory power of the relationship between the dependent and the independent variables proven significant.

It can be depicted from table (6.21) that the significant variables are CSTF/TA, OH/TA, NIEA/TA, EQ/TA and PLOL/TLO. The significant variables have significance values of 0.000, 0.004, 0.013, 0.000 and 0.000 and the t values of 4.810, -2.968, -2.544, 4.977 and -6.447 respectively. The beta coefficients for those variables are 0.660, -0.323, -0.323, 0.485 and -0.570. As shown by the results of the final model, one variable is excluded from the model which is TLO/TA because it was found insignificant and five variables were found significant. It was found that, the ROA of Egyptian conventional banks is positively affected by the ratio of (CSTF/TA) which is one ratio of the fund sources management measures used to assess the effect of the business strategy as a contingent determinant of profitability. Also the ROA was found to positively related to the ratio of equity to total assets (EQ/TA) which is one of the leverage ratios used also as part of the assessment of the contingency effect of the business strategy on the

profitability of conventional banks. Additionally the ROA is found to be negatively correlated with 3 ratios, OH/TA, NIEA/TA, and PLOL/TLO. The first two ratios (OH/TA, NIEA/TA) are both ratios to measure the fund uses management which are eventually a sign of a negative relationship between the ROA and the conventional banks business strategy. While the PLOL/TLO ratio which is a risk measure signals that there is a negative relationship between the organizational attributes measured by risk and the profitability measured by ROA. Accordingly, the regression equation could be expressed as follows:

$$\text{ROA} = 0.170 + 0.054 * \text{CSTF/TA} - 0.734 * \text{OH/TA} - 0.096 * \text{NIEA/TA} + 0.155 * \text{EQ/TA} - 0.057 * \text{PLOL/TLO}.$$

Moreover, as depicted in table (6.21), the overall results for the regression model were significant at P-value = .000 (less than .05), and F statistics value of 16.126. These results mean that the regression model is true and the results are statistically significant.

ROA is positively affected by CSTF/TA and EQ/TA and negatively affected by OH/TA, NIEA/TA and PLOL/TLO. The CSTF/TA and EQ/TA are two ratios used to measure the effect of business strategy adopted by conventional banks on profitability. The CSTF/TA ratio measures the fund sources management while the EQ/TA measures the quality of capital and the effect of leverage on profitability. From the results shown above, it can be concluded that when the percentage of short-term financing and deposits is high as compared to assets this leads to an increase in ROA of conventional banks. The CSTF is composed of current accounts, saving accounts, checking accounts and time deposits (ranges from one week to one year). Those fund sources are relatively cheap and less costly on conventional banks than long-term sources. Thus, whenever their balances are high relative to total assets, the profitability level of conventional banks increases.

**Table (6.21): ROA Model Summary and Coefficients**

variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity statistics	
	B	Std. error	Beta			Tolerance	VIF
Constant	.170	.390		.436	.664		
CSTF/TA	.054	.011	.660	4.810	.000	.311	3.211
OH/TA	-.734	.247	-.323	-2.968	.004	.494	2.024
NIEA/TA	-.096	.038	-.323	-2.544	.013	.362	2.759
EQ/TA	.155	.031	.485	4.977	.000	.617	1.620
PLOL/TLO	-.057	.009	-.570	-6.447	.000	.749	1.335
Multiple R	.753						
R <sup>2</sup>	.567						
Adjusted R <sup>2</sup>	.531						
Std error	1.14486						
F statistics	16.126						
Significance	.000						
Durbin Watson	1.509						

Furthermore, it can be argued that the existence of high equity level affects profitability positively as it ameliorates the quality of capital and decreases the percentage of leverage and consequently increases ROA. A high EQ/TA means that the banks are self financed and they don't get extensive credit from other banks or the central bank, which is considered a very expensive source of fund. This ratio is also an indicator that the Egyptian conventional banks don't suffer from any liquidity squeeze and their liquidity levels are sufficient. To sum up, it can be deduced from the results that, the business

strategy of conventional banks significantly affects the performance of the banks and their profitability level positively.

On the other hand, the ROA of conventional banks are negatively affected by OH/TA, NIEA/TA and PLOL/TLO. The effect of the business strategy adopted by conventional banks can be traced evidently. The OH/TA and NIEA/TA are two ratios used to measure the management of fund uses in conventional banks and they both manifested a negative relationship with ROA.

The OH/TA is considered one of the efficiency measures and one of the important determinants of profitability in any bank. The OH/TA is one of the ratios used to measure the effect of the fund uses management. The result shows that the ROA of conventional banks are negatively affected by the ratio of OH/TA which is a variable used to measure the effect of business strategy of the bank concerning their fund uses management. Most of the literature on banks profitability confirm that reduced overhead and expenses improve the performance of any bank and hence, raise the profitability of banks (Bourke 1989). However, a high value of OH/TA indicates that there is a lack of efficiency in expenses management since banks have to pass part of their increased cost to their customers and hence negatively affect profitability. The high OH/TA ratio also implies that the profits earned by conventional banks are inappropriate in terms of their high overhead like wages and salaries.

Concerning the NIEA/TA, its negative impact on ROA denotes that when this ratio is high, ROA of conventional banks decreases indicating an inverse relationship between the two variables. Demirgüç-Kunt and A. Huizinga (1998) in their study of banks in 80 countries, they found that those banks with relatively high non-interest earning assets are less profitable than banks with lower non-interest earning assets. This result can be justified by the idea that in conventional banks the item of non-interest earning assets is composed of cash, fixed assets, intangible assets and any other asset that doesn't result in interest. For conventional banks, when the amount of those assets increases relevant to total assets, it becomes sort of burden and cost on conventional banks to the extent that the opportunity cost of those assets is calculated since they don't bring any income to the bank. The NIEA in banks results in amortization, depreciation and opportunity

cost of idle and unused cash balances. Hence, a negative relationship between NIEA/TA and ROA is expected and logical for conventional banks.

Finally, the results showed that PLOL/TLO has a negative effect over the profitability of Egyptian conventional banks namely ROA. High PLOL/TLO ratio designates poor quality of loans i.e. higher risk of the loan portfolio. A poor loan quality would reduce interest revenue and increase bank's provision cost. Thus, the negative relationship reached in this study infers that Egyptian conventional banks should keep a safe level of loans in comparison to its total deposits and should be selective in the components of their loan portfolio and accordingly, leads to an increase in their profitability levels from the collection of interest revenues.

### ***Researcher Conclusion***

From the argument presented above, it can be concluded that the ROA of conventional banks in Egypt are positively affected by the ratios CSTF/TA and EQ/TA and negatively affected by OH/TA, NIEA/TA and PLOL/TLO.

The CSTF/TA and EQ/TA positively affect the ROA of conventional banks. They show the effect of the business strategy as an internal contingency on the profitability of conventional banks. The CSTF/TA represents the effect of the fund sources management part of the business strategy while the EQ/TA represents the quality of capital and the degree of leverage in conventional banks. The positive relationships between the two ratios and the ROA show that the business strategy is an important determinant of ROA in conventional banks.

The OH/TA, NIEA/TA and PLOL/TLO negatively affect the ROA of the Egyptian conventional banks. Once again the OH/TA and NIEA/TA indicates the strong effect of the business strategy as an internal contingency over ROA. While the PLOL/TLO represents the effect of the organizational attributes as one of the internal contingency factors over the ROA of conventional banks.

***Comparison of the Determinants of Islamic Banks and Conventional Banks (ROA):***

After presenting the results of the study for the first model of the regression measuring the effect of the internal and external contingencies over the ROA of Islamic banks and conventional banks in Egypt, the researcher will make a comparison between the two results as presented in table (6.22).

**Table (6.22): Comparing the Determinants of ROA between Islamic Banks and Conventional Banks**

Determinants of ROA in Islamic banks	Determinants of ROA in conventional banks
<ul style="list-style-type: none"><li>• Significant positive relationship with SIZE (organizational attributes).</li><li>• Significant positive relationship with NIEA/TA (fund uses management-business strategy).</li><li>• Significant negative relationship with GDP (macroeconomic variables).</li></ul>	<ul style="list-style-type: none"><li>• Significant positive relationship with CSTF/TA (fund sources management- business strategy).</li><li>• Significant positive relationship with EQ/TA (leverage-business strategy).</li><li>• Significant negative relationship with OH/TA (fund uses management-business strategy).</li><li>• Significant negative relationship with NIEA/TA (fund uses management-business strategy).</li><li>• Significant negative relationship with PLOL/TLO (risk-organizational attributes).</li></ul>

From the results presented in table (6.22), it can be concluded that the determinants of ROA in the case of Egyptian Islamic banks are different from those of conventional banks though both types of banks are working in the same Egyptian market under the same legislative and regulative umbrella. The researcher's conclusions and justifications about these disparities are discussed later in the conclusion.

The second sub-hypothesis is formulated as follows:

***H3b: There is a significant relationship between ROE and the internal and external contingencies.***



In order to test the second sub-hypothesis, the second model will use the ROE as the dependent variable. Table (6.23) presents the descriptive statistics for the ROE variable of conventional banks.

The ROE is calculated by dividing the profit after tax by equity capital. It is a general measurement for profitability that reflects the ability of the bank to generate return on its equity capital. A high ratio value indicates a better and strong financial performance of the bank.

**Table (6.23): Descriptive Statistics for the ROE**

<b>Variable Description</b>	<b>Mean</b>	<b>Standard deviation</b>	<b>Minimum</b>	<b>Maximum</b>
ROE	6.8238	26.48823	-122.20	39.88

Using the ROE as a contingent determinant of conventional bank profitability in the stepwise regression analysis model as illustrated in table (6.24) shows that  $R^2$  equals to 56.2% and the adjusted  $R^2$  equals to 51.3%. Many test-runs were performed in order to reach this final significant regression model. The value of the Durbin Watson test is equal to 1.164 which is lower than 2, while the VIF column shows values of 2.226, 2.912, 1.639, and 1.456. All the VIF values are less than 10. Consequently, the model shows no sign of autocorrelation or multicollinearity, and it can be concluded that the model has a reasonable explanatory power of the relationship between the dependent and the independent variables proven significant.

Results in table (6.24) show that the significant variables in the final model are OH/TA, NIEA/TA, EQ/TA and PLOL/TLO with significant values of 0.000, 0.021, 0.001 and 0.000 and t values of -4.236, -2.352, 3.595 and -6.641. The beta coefficients are -.493, -.313, .359, and -.625 for OH/TA, NIEA/TA, EQ/TA and PLOL/TLO respectively. As it can be depicted from this table, many variables were omitted from the model because they were found insignificant and only four variables were found significant. The ROA of the Egyptian conventional banks is positively influenced by the ratio of EQ/TA and

negatively affected by the ratios of OH/TA, NIEA/TA and PLOL/TLO. Accordingly, the regression equation could be expressed as follows:

$$\text{ROE} = 0.281 - 17.747 * \text{OH/TA} - 1.478 * \text{NIEA/TA} + 1.816 * \text{EQ/TA} - .990 * \text{PLOL/TLO}$$

The overall results of the regression model are significant at P-value of 0.000 and F statistics of 11.529. It is clear from the results presented that the regression model is true and the results are statistically significant.

**Table (6.24): ROE Model Summary and Coefficients**

variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity statistics	
	B	Std. error	Beta			Tolerance	VIF
Constant	.281	6.532		.043	.966		
OH/TA	-17.747	4.190	-.493	-4.236	.000	.449	2.226
NIEA/TA	-1.478	.628	-.313	-2.352	.021	.343	2.912
EQ/TA	1.816	.505	.359	3.595	.001	.610	1.639
PLOL/TLO	-.990	.149	-.625	-6.641	.000	.687	1.456
Multiple R	.749						
R <sup>2</sup>	.562						
Adjusted R <sup>2</sup>	.513						
Std error	18.48714						
F statistics	11.529						
Significance	.000						
Durbin Watson	1.164						

EQ/TA is the only variable that affects ROE positively while the other variables OH/TA, NIEA/TA and PLOL/TLO, they all affect ROE negatively. The OH/TA, NIEA/TA, EQ/TA ratios all measure the effect of business strategy embraced by conventional banks. The OH/TA and NIEA/TA, both ratios measure the fund uses management, while the EQ/TA measures the capital quality and level of leverage in the bank. The PLOL/TLO ratio represents the effect of organizational attributes over ROE of conventional banks. It measures the efficiency and risk of conventional banks in Egypt.

The relationship between the ROE and its significant determinants has the same direction and pattern as with the ROA and its significant determinants. This is considered a support of the results and a proof of its consistency.

Concerning the variable with a positive effect on ROE which is EQ/TA, it signals that the conventional banks equity level is a major catalyst that boosts the performance of ROE in conventional banks. The higher the amounts of asset on which shareholders have a residual claim the higher the ROE in conventional banks. This ratio represents part of the business strategy adopted by conventional banks that affects positively and significantly its performance.

On the other hand, the variables that affected the performance of conventional banks negatively are OH/TA, NIEA/TA and PLOL/TLO. The OH/TA should normally have a negative relationship with all the profitability measures. This is due to the fact that if banks' management is successful at contracting their overhead and expenses this would eventually lead to an increase in their profitability level. In general, any bank strives to achieve the lowest operating expenses possible without sacrificing their competitiveness within the industry. The OH/TA is a measurement of fund uses management and it shows that the ROE of conventional banks in Egypt is negatively affected by the ratio of OH/TA which is one of the variables used to measure the effect of business strategy over the performance of conventional banks in Egypt.

With respect to the second variable that affects ROE of conventional banks negatively which is the NIEA/TA, it is worth noting that high value of NIEA/TA negatively affects performance of banks according to the study made by Demirgüç-Kunt and A. Huizinga

(1998). In the aforementioned argument about the results of the ROA, it was stated that the NIEA for conventional banks are composed of those assets that do not yield any income whatsoever for conventional banks and consequently, an increase in their percentage of total assets represents a cost on the bank. Thus, an inverse relationship between NIEA/TA and ROE is an acceptable and favorable relationship in case of conventional banks' case.

Lastly, the ratio of PLOL/TLO which exhibits a negative relationship with ROE of conventional banks, designates the quality of loans in a bank; the higher the ratio, the more problematic the loans of the bank are. As a consequence, an increase in this ratio means an increase in the risk of the loan portfolio of the bank and decreases its interest revenue and eventually, affects ROE negatively and leads to a decrease in its profitability.

### ***Researcher Conclusion***

There is a significant positive relationship between the ROE and EQ/TA. This relationship proves how important is the business strategy as an internal contingency in determining the performance of conventional banks in Egypt.

There is an inverse relationship between the variables OH/TA, NIEA/TA and PLOL/TLO and the performance of conventional banks as measured by ROE. Repeatedly, the strong effect of a bank's business strategy is manifested in this regression model. The OH/TA and NIEA/TA measures the uses of funds in conventional banks while the PLOL/TLO represents the risk effect of having too many bad loans by the banks. The PLOL/TLO is one of the variables used to measure the effect of organizational attributes as one of the internal contingencies affecting ROE.

### ***Comparison of the Determinants of Islamic Banks and Conventional Banks (ROE):***

From the results presented in table (6.25), it can be concluded that the determinants of ROE in the case of Egyptian Islamic banks are different from those of conventional banks, yet consistent with the previous results for both types of banks. The researcher's conclusions and justifications about these differences are discussed later in the conclusion.

**Table (6.25): Comparing the Determinants of ROE between Islamic Banks and Conventional Banks**

Determinants of ROE in Islamic banks	Determinants of ROE in conventional banks
<ul style="list-style-type: none"> <li>• Significant positive relationship with NIEA/TA (fund uses management-business strategy).</li> </ul>	<ul style="list-style-type: none"> <li>• Significant positive relationship with EQ/TA (leverage-business strategy).</li> <li>• Significant negative relationship with OH/TA (fund uses management-business strategy).</li> <li>• Significant negative relationship with NIEA/TA (fund uses management-business strategy).</li> <li>• Significant negative relationship with PLOL/TLO (risk-organizational attributes).</li> </ul>

The third sub-hypothesis is formulated as follows:

***H3c: There is a significant relationship between BTP/TA and the internal and external contingencies.***

In order to test the third sub-hypothesis, the third model will use the BTP/TA as the dependent variable. Table (6.26) presents the descriptive statistics for the BTP/TA variable of conventional banks.

**Table (6.26): Descriptive Statistics for the BTP/TA**

Variable Description	Mean	Standard deviation	Minimum	Maximum
BTP/TA	1.0377	1.95944	-7.91	3.39

The ratio of before tax profit to total assets (BTP/TA) is used by many studies as a measure of banks' profitability. It measures the bank's profit margin. This measure reflects the bank's ability to generate higher profits by diversifying their portfolios (Bashir, 2003; Hassan and Bashir, 2003). This ratio gives a signal about the management's ability to generate returns on its deposits. It was used as a rough proxy for bank efficiency by Goldberg and Rai (1996).

When considering the BTP/TA as the dependent variable, and by applying the backward stepwise method, it was found that  $R^2$  started by 58.7% and then decreased till it reached the value of 54.1%. Though the amount of decrease in the value of  $R^2$  is not quite large, yet it was found by the researcher that it is much better to accept this change as it results in a significant and true regression model.

The regression equation is expressed as follows:

$$\text{BTP/TA} = 0.268 + 0.059 * \text{CSTF/TA} - 0.927 * \text{OH/TA} - 0.109 * \text{NIEA/TA} + 0.186 * \text{EQ/TA} - 0.065 * \text{PLOL/TLO}.$$

It can be deduced from table (6.27) and the regression equation formulated above that, the significance values are 0.000, 0.003, 0.019, 0.000 and 0.000 and the t values are 4.367, -3.110, -2.394, 4.969 and -6.063 for the significant variables of CSTF/TA, OH/TA, NIEA/TA, EQ/TA and PLOL/TLO respectively. The significance values are all less than 0.05; consequently, the model can be considered significant. The beta coefficients are +0.616, -0.348, -0.313, + 0.498 and - 0.552 for CSTF/TA, OH/TA, NIEA/TA, EQ/TA and PLOL/TLO respectively.

Moreover, as shown in table (6.27), the overall results for the regression model were significant at P-value = .000, and F statistics value of 14.545. These results mean that the regression model is true and the results are statistically significant.

Concerning the testing of the autocorrelation and the multicollinearity assumptions, it can be concluded that there is no sign of multicollinearity or autocorrelation. The Durbin Watson value is equal to 1.289 which is lower than 2. In addition, by checking the VIF column in table (6.27), it has values of 3.211, 2.024, 2.759, 1.620 and 1.335, which are all less than 10. As a result, it can be concluded that the model is considered significant and true.

The determinants of BTP/TA in conventional banks are CSTF/TA, OH/TA, NIEA/TA, EQ/TA and PLOL/TLO. BTP/TA is positively affected by CSTF/TA and EQ/TA and negatively affected by OH/TA, NIEA/TA and PLOL/TLO. Those results are compatible with the results reached before especially in the first regression model used to explore the determinants of ROA in conventional banks. The CSTF/TA is a ratio used to

measure the management of fund sources while the EQ/TA is used to assess the quality of capital and the effect of leverage on the performance and profitability of conventional banks. Both ratios are considered signals for the influence and importance of the business strategy contingency over profitability.

**Table (6.27): Model Summary and Coefficients**

variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity statistics	
	B	Std. error	Beta			Tolerance	VIF
Constant	.268	.470		.569	.571		
CSTF/TA	.059	.013	.616	4.367	.000	.311	3.211
OH/TA	-.927	.298	-.348	-3.110	.003	.494	2.024
NIEA/TA	-.109	.046	-.313	-2.394	.019	.362	2.759
EQ/TA	.186	.037	.498	4.969	.000	.617	1.620
PLOL/TLO	-.065	.011	-.552	-6.063	.000	.749	1.335
Multiple R	.736						
R <sup>2</sup>	.541						
Adjusted R <sup>2</sup>	.504						
Std error	1.38007						
F statistics	14.545						
Significance	.000						
Durbin Watson	1.289						

The CSTF/TA is composed of all sources of funds with short-term maturities which are considered a very cheap source for funds for banks than long-term sources. Those sources level whenever they increase the profitability levels of a bank increases

simultaneously. While the EQ/TA represents a cushion for shareholders against any potential credit problems. The higher the EQ/TA ratio, the higher is the profitability of the bank. The high EQ/TA protects the bank from any liquidity problems that may force the bank to get credit or loans from other banks at high interest rates.

Conversely, the BTP/TA of conventional banks is negatively related to OH/TA, NIEA/TA and PLOL/TLO. The OH/TA and NIEA/TA are two ratios used to measure the effect of fund uses management on the performance of conventional banks in Egypt as one of the business strategy variables. The increase in the OH/TA decreases the profitability of conventional banks and affects its performance negatively. This ratio is used as a reference about the efficiency of the management in controlling their expenses and overhead while maintaining the quality of their service provided in a competitive environment. In respect of the ratio NIEA/TA, its negative sign symbolizes that it has an inverse relationship with BTP/TA. This negative relationship illustrates the cost that these types of assets charge on the profitability since those types of assets don't bring or result in profit for banks on the contrary they represent sort of cost or burden on the bank. So the lower the level of the NIEA/TA ratio the profitability of the bank will be.

At last, the PLOL/TLO shows an inverse relationship with BTP/TA as expected, since the increase in the provision of loan losses signals a bad and critical situation for the bank and an adverse impact on its profitability levels. The PLOL/TLO is a measure of risk for the conventional banks and is used in this research to show the effect of the organizational attributes on the profitability of banks. The significance of the relationship between PLOL/TLO and BTP/TA gives an indication about the importance that conventional banks should put on this organizational attribute in order to try to keep their earnings levels safe without jeopardizing the erosion of its profitability levels from loan losses.

### ***Researcher Conclusion***

From the foregoing discussion, it can be inferred that the BTP/TA of conventional banks in Egypt are positively affected by the ratios CSTF/TA and EQ/TA and negatively affected by OH/TA, NIEA/TA and PLOL/TLO.



The CSTF/TA and EQ/TA positively affect the BTP/TA of conventional banks. They show the effect of the business strategy as an internal contingency on the profitability of conventional banks. The CSTF/TA represents the effect of the fund sources management part of the business strategy while the EQ/TA represents the quality of capital and the degree of leverage in conventional banks. The positive relationship between the two ratios and the BTP/TA presents the importance of the business strategy as one of the determinant of BTP/TA in conventional banks.

The OH/TA, NIEA/TA and PLOL/TLO negatively affect the BTP/TA of the Egyptian conventional banks. Likewise, the OH/TA and NIEA/TA indicates the strong effect of the business strategy as an internal contingency over BTP/TA. While the PLOL/TLO represents the effect of the organizational attributes as one of the internal contingency factors over the BTP/TA of conventional banks.

***Comparison of the Determinants of Islamic Banks and Conventional Banks (BTP/TA):***

After displaying the outcomes of the study for the third model of the regression in order to explore the determinants of BTP/TA for Islamic banks and conventional banks in Egypt, the researcher will make a comparison between the two results as shown in table (6.28).

From the results presented in table (6.28), it can be concluded that the determinants of BTP/TA in the case of Egyptian Islamic banks are different from those of conventional banks though both types of banks are working in the same Egyptian market under the same legislative and regulative umbrella. The researcher's conclusions and justifications about these dissimilarities are discussed later in the conclusion.

**Table (6.28): Comparing the Determinants of BTP/TA between Islamic Banks and Conventional Banks**

Determinants of BTP/TA in Islamic banks	Determinants of BTP/TA in conventional banks
<ul style="list-style-type: none"> <li>• Significant positive relationship with SIZE (organizational attributes).</li> <li>• Significant positive relationship with NIEA/TA (fund uses management-business strategy).</li> <li>• Significant negative relationship with GDP (macroeconomic variables).</li> </ul>	<ul style="list-style-type: none"> <li>• Significant positive relationship with CSTF/TA (fund sources management-business strategy).</li> <li>• Significant positive relationship with EQ/TA (leverage-business strategy).</li> <li>• Significant negative relationship with OH/TA (fund uses management-business strategy).</li> <li>• Significant negative relationship with NIEA/TA (fund uses management-business strategy).</li> <li>• Significant negative relationship with PLOL/TLO (risk-organizational attributes).</li> </ul>

The fourth sub-hypothesis is formulated as follows:

***H3d: There is a significant relationship between NIM and the internal and external contingencies.***

In order to test the second sub-hypothesis, the fourth model will use the NIM as the dependent variable. Table (6.29) presents the descriptive statistics for the NIM variable of conventional banks.

**Table (6.29): Descriptive Statistics for the NIM**

Variable Description	Mean	Standard deviation	Minimum	Maximum
NIM	2.9517	2.05457	-2.75	7.19

For conventional banks, the NIM is the profitability ratio that measures the difference between interest income earned through lending activities or any other interest bearing investments and the interest expenses paid to lenders. While in the case of Islamic banks, the NIM is generated from non-interest bearing activities, which are in specific Musharakah, Murabah and Mudarabah and savings and Investment accounts. Those activities are equivalent to the lending and deposits operations in conventional banks.

**Table (6.30): NIM Model Summary and Coefficients**

variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity statistics	
	B	Std. error	Beta			Tolerance	VIF
Constant	-.774	.539		-1.436	.155		
EQ/TA	.090	.031	.229	2.894	.005	.730	1.370
TL/TA	.032	.007	.429	4.953	.000	.610	1.640
PLOL/TLO	-.070	.009	-.572	-7.784	.000	.847	1.181
GDPGR	.532	.127	.399	4.190	.000	.504	1.986
GDP	-.011	.003	-.363	-4.114	.000	.585	1.708
Multiple R	.811						
R <sup>2</sup>	.657						
Adjusted R <sup>2</sup>	.635						
Std error	1.24194						
F statistics	28.788						
Significance	.000						
Durbin Watson	1.303						

When using the NIM as the dependent variable, and by applying the backward stepwise method, it was found that the R<sup>2</sup> is equal to 65.7%. The significant variables are EQ/TA, TL/TA, PLOL/TLO, GDPGR and GDP and their significance values are 0.005, 0.000, 0.000, 0.000 and 0.000 respectively. The t values equal to 2.894, 4.953, -7.784, 4.190 and -4.114 for those variables.

It is clear that the significance values are all less than 0.05; consequently, the model can be considered significant. The beta coefficients are 0.229, 0.429, -0.572, 0.399, and -0.363. Some variables show positive effects while other variables show negative effect. Accordingly, the regression equation is expressed as follows:

$$\text{NIM} = -0.774 + 0.090 * \text{EQ/TA} + 0.032 * \text{TL/TA} - 0.070 * \text{PLOL/TLO} + 0.532 * \text{GDPGR} - 0.011 * \text{GDP}.$$

Moreover, as shown in table (6.30), the overall results for the regression model were significant at P-value = .000 (less than .05), and F statistics value of 28.788. These results mean that the regression model is true and the results are statistically significant.

The results presented in the table shows no sign of autocorrelation or multicollinearity. The Durbin Watson test shows a value of 1.303, which is less than 2. The VIF column shows values of 1.370, 1.640, 1.181, 1.986 and 1.708. It is noticeable that all the values are less than 5 which imply the absence of any multicollinearity or any autocorrelation in the model that is likely to adversely affect the regression results. All the previously mentioned facts show that the model has a reasonable explanatory power of the relationship between the dependent and the independent variables proven to be significant.

From the statistical analysis previously performed, it was found that the NIM is positively related to EQ/TA, TL/TA and GDPGR and negatively related to PLOL/TLO and GDP.

On one hand, the results in this model came with new relationships while on the other hand; it confirmed and validated other relationships from past models. The old proved relationships are represented in the positive relationship with EQ/TA and the negative relationship with PLOL/TLO. Like formerly discussed, the EQ/TA is a measure of

capital quality that assesses the effect of leverage on profitability. It is one of the business strategy variables used. A positive relationship between EQ/TA and NIM refers to the importance of having a convenient equity level so as banks don't find itself forced to get expensive finance from outside (either other banks or central bank) in order to cover up its liquidity shortages and squeezes. Accordingly, the higher the EQ/TA is the higher the NIM will be.

Concerning the negative effect of PLOL/TLO, a high value of this ratio means a decrease in the profitability of a bank. This ratio is a measure of the risk that a bank may face if its loan portfolio contains too many bad loans with high provision for loan losses. It is one of the variables used to assess the effect of organizational attributes on banks' performance. The effect of PLOL/TLO on NIM is considered a major alert for conventional banks in Egypt for the importance of watching their loan portfolios to make sure it is kept at sound levels and high quality.

Whereas the new relationship that showed up in this model only was in the effect of TL/TA, GDPGR and GDP over NIM. Concerning the first variable which is TL/TA, this ratio is used to measure the effect of organizational attributes over banks' performance. Though this ratio is one of the variables used to measure risk, yet it is a very important ratio in banks due to the very distinguished nature of liabilities in banks. The largest component of liabilities in banks is composed of deposits money which is the main source of fund in any bank. The highest the amount of deposits the highest will be the profitability of the bank. Even if the deposits are not used to grant loans and collect interest revenues, the deposits money are invested in treasure bills to eventually get interest revenues as well. So as it is clear, the liability side in banks is crucial and necessary to be able for the bank to achieve profits. The higher the TL/TA ratio, the higher the profitability of the bank will be (Obamuyi, 2013).

The second variable GDPGR is positively related to NIM of conventional banks. The economic growth of any country is one of the main macroeconomic indicators that affect the profitability of any bank. Higher economic growth encourages banks to lend more and permits them to charge higher margins as well as improving the quality of their assets (Chowdhury, 2015; Dietrich and Wanzenrid, 2009; Kosmidou, 2008 and Pasiouras and Kosmidou, 2007). Profitability and economic growth have significant

positive relationship. The result of this research corresponds to the results of the literature which supports the fact that an increase in the GDP growth will lead to an increase in the profitability of banks eventually.

The final variable in this regression model is the GDP and its negative relationship with the NIM. Same as the case with Islamic banks, GDP has a negative effect on the profitability measures of Islamic and conventional banks. Again this result is ambiguous as most of the results show a positive relationship between GDP, GDPGR or GDPPC and profitability measures.

### ***Researcher Conclusion***

From the above discussion, it can be concluded that the NIM of conventional banks in Egypt are positively affected by the ratios EQ/TA, TL/TA and GDPGR and negatively affected by PLOL/TLO and GDP.

The EQ/TA variable positively affects the NIM of conventional banks. The EQ/TA is a measure of leverage and quality of capital; it implies that the business strategy as an internal contingency has an important effect on the profitability of conventional banks. The TL/TA represents the risk effect of the conventional banks. It is a measure of the effect of the organizational attributes on the profitability of conventional banks. Lastly, the GDPGR is a macroeconomic indicator that measures the relationship between GDPGR and conventional banks' performance.

The PLOL/TLO negatively affects the NIM of the Egyptian conventional banks. This ratio is another measure of risk and the higher this ratio the lower will be the profitability of banks. That's why, a negative relationship between the PLOL/TLO and NIM is a normal and expected. Again this ratio shows the importance of the organizational attributes contingency over conventional banks' profitability.

Lastly, the GDP variable is negatively related to NIM of conventional banks. As mentioned before, this relationship is ambiguous as normally the macroeconomic indicators GDP, GDPGR and GDPPC shows a positive effect on the profitability measures of the banking system in any country.

***Comparison of the Determinants of Islamic Banks and Conventional Banks (NIM):***

From the results presented in table (6.31), it can be concluded that the determinants of NIM in the case of Egyptian Islamic banks are different from those of conventional banks though both types of banks are working in the same Egyptian market under the same legislative and regulative umbrella. The researcher's conclusions and justifications about these dissimilarities are discussed later in the conclusion.

**Table (6.31): Comparing the Determinants of NIM between Islamic Banks and Conventional Banks**

<b>Determinants of NIM in Islamic banks</b>	<b>Determinants of NIM in conventional banks</b>
<ul style="list-style-type: none"><li>• Significant positive relationship with GDPPC (macroeconomic variables).</li></ul>	<ul style="list-style-type: none"><li>• Significant positive relationship with EQ/TA (leverage-business strategy).</li><li>• Significant positive relationship with TL/TA (risk- organizational attributes).</li><li>• Significant positive relationship with GDPGR (macroeconomic variables).</li><li>• Significant negative relationship with PLOL/TLO (risk-organizational attributes).</li><li>• Significant negative relationship with GDP (macroeconomic variables).</li></ul>

The fifth sub-hypothesis is formulated as follows:

***H3e: There is a significant relationship between NNIM and the internal and external contingencies.***

In order to test the fifth sub-hypothesis, the fifth model will use the NNIM as the dependent variable. Table (6.32) presents the descriptive statistics for the NNIM variable of conventional banks.

**Table (6.32): Descriptive Statistics for the NNIM**

Variable Description	Mean	Standard deviation	Minimum	Maximum
NNIM	13.9358	9.99550	-4.82	49.56

For conventional banks, the NNIM is one of the profitability ratios used to measures the income derived from non-interest earned assets. It is calculated by dividing the net income from non interest earning activities by the non interest earning assets. It is the profit derived from activities other than lending. This ratio is calculated in such a way to be comparable with the same ratio of Islamic banks.

By using the backward stepwise method and the NNIM is the dependent variable, it was found that  $R^2$  started by 50.6% and then decreased till it reached the value of 47.7%. Though the amount of decrease in the value of  $R^2$  is not that large, yet it was found necessary by the researcher in order to reach a significant and true regression model.

It can be deduced from table (6.33) that, the variables that were found significant are CSTF/TA, NIEA/TA, EQ/TA and TLO/TA with significance values of 0.000, 0.000, 0.017 and 0.009 respectively. The t values are 4.229, -5.095, 2.435 and 2.681 for those variables.

It is clear that the significance values are all less than 0.05; consequently, the model can be considered significant. The beta coefficients are 0.631, -0.711, 0.239 and 0.373. All the variables show positive effects while only one variable shows a negative effect. Accordingly, the regression equation is expressed as follows:

$$NNIM = 2.146 + 0.307 * CSTF/TA - 1.267 * NIEA/TA + 0.456 * EQ/TA + 0.205 * TLO/TA.$$

Moreover, as shown in table (6.33), the overall results for the regression model were significant at P-value = .000 (less than .05), and F statistics value of 8.205. These results mean that the regression model is true and the results are statistically significant.



**Table (6.33): NNIM Model Summary and Coefficients**

variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity statistics	
	B	Std. error	Beta			Tolerance	VIF
Constant	2.146	3.731		.575	.567		
CSTF/TA	.307	.073	.631	4.229	.000	.327	3.061
NIEA/TA	-1.267	.249	-.711	-5.095	.000	.373	2.684
EQ/TA	.456	.187	.239	2.435	.017	.752	1.329
TLO/TA	.205	.076	.373	2.681	.009	.375	2.667
Multiple R	.691						
R <sup>2</sup>	.477						
Adjusted R <sup>2</sup>	.419						
Std error	7.62028						
F statistics	8.205						
Significance	.000						
Durbin Watson	2.268						

The results presented in the table shows no sign of autocorrelation or multicollinearity. The Durbin Watson test shows a value of 2.268, which is slightly above than 2, however, the VIF column shows values of 1.370, 1.640, 1.181, 1.986 and 1.708 signaling no sign of autocorelation. It is noticeable that all the values are less than 5 which imply the absence of any severe multicollinearity in the model that is likely to adversely affect the regression results as was mentioned in Tantawi (2007) and Gupta (2000). All the previously mentioned facts show that the model has a reasonable explanatory power of the relationship between the dependent and the independent variables proven significant.

The CSTF/TA, EQ/TA and TLO/TA are three ratios used to measure the effect of business strategy adopted by conventional banks on profitability. The CSTF/TA ratio measures the fund sources management while the EQ/TA and TLO/TA; they both measure the quality of capital and the effect of leverage on profitability. From the results shown above, it can be concluded that when the percentage of short-term financing and deposits is high as compared to assets this leads to an increase in NNIM of conventional banks. The CSTF is composed of current accounts, saving accounts, checking accounts and time deposits (ranges from one week to one year). Those fund sources are relatively cheap and less costly on conventional banks than long-term sources. Thus, whenever their balances are high relative to total assets, the profitability measures of conventional banks increase.

Furthermore, it can be argued that the existence of high equity level affects profitability positively as it improves the quality of capital and consequently increases NNIM as a profitability measure. A high EQ/TA means that the banks are self financed and they don't get extensive credit from other banks or the central bank, which is considered very expensive source of fund. This ratio is also an indicator that the Egyptian conventional banks don't suffer from any liquidity squeeze and their liquidity levels are sufficient. To summarize, it can be concluded from the results that, the business strategy of conventional banks significantly affects the performance of the banks and their profitability level positively.

Finally, the ratio of TLO/TA is also one of the measures used to assess the quality of capital in banks. This result corresponds with many results in the literature like Muda et al (2013) and Alkassim (2005). A positive relationship between this ratio and profitability means that higher lending generates higher income for banks. It is worth mentioning that in Egypt there are strict rules and regulations concerning the ratio of loans to total assets so as it is kept within a safe percentage that doesn't endanger the financial stability and soundness of the Egyptian banking system because a very high percentage of loans to total assets means that large portions of the banks' assets are tied up in loans and this could consequently reduce the liquidity of the bank and make the bank vulnerable to financial crisis and shocks like what happened before in the US subprime crisis.

Moreover, the NNIM is negatively affected by NIEA/TA. The NIEA/TA is a ratio used to measure the effect of fund uses management on profitability. It is one of the variables used to assess the effect of business strategy over banks' performance. This negative impact denotes that when this ratio is high, NNIM of conventional banks decreases indicating an inverse relationship between the two variables. This fact can be justified by the idea that in conventional banks the item of non-interest earning assets is composed of cash, fixed assets, intangible assets and any other asset that doesn't result in interest. For conventional banks, when the amount of those assets increases relevant to total assets, it becomes sort of burden and cost on conventional banks since they don't bring any income to the bank. The NIEA in banks results in amortization, depreciation and opportunity cost of idle and unused cash balances (Demirgüç-Kunt and A. Huizinga, 1998). Hence, a negative relationship between NIEA/TA and NNIM is expected and logical for conventional banks. This relationship is proved before with ROA, ROE and BTP/TA and this strengthens the negative effect that this ratio has on performance.

### ***Researcher Conclusion***

From the argument presented above, it can be concluded that the NNIM of conventional banks in Egypt are positively related to CSTF/TA, EQ/TA and TLO/TA and negatively related to NIEA/TA.

The CSTF/TA, EQ/TA and TLO/TA positively affect the NNIM of conventional banks. They all present the effect of the business strategy as an internal contingency on the profitability of conventional banks. The CSTF/TA represents the effect of the fund sources management part of the business strategy while the EQ/TA and TLO/TA represent the quality of capital and the degree of leverage in conventional banks. The positive relationships between the three ratios and the NNIM show that the business strategy is an important determinant of NNIM in conventional banks.

Finally, the CSTF/TA negatively affects the NNIM of the Egyptian conventional banks. Once again this ratio is one of the measures of the business strategy contingencies used to test for fund sources management. This result proves the importance of a good management for fund sources in conventional banks and their essential effect on

profitability. This result was found when testing for the determinants of ROA and BTP/TA.

***Comparison of the Determinants of Islamic Banks and Conventional Banks (NNIM):***

From the results presented in table (6.34), it can be concluded that the determinants of NNIM in the case of Egyptian Islamic banks are different from those of conventional banks though both types of banks are working in the same Egyptian market under the same legislative and regulative umbrella. The researcher's conclusions and justifications about these dissimilarities are discussed later in the conclusion.

**Table (6.34): Comparing the Determinants of NNIM between Islamic Banks and Conventional Banks**

<b>Determinants of NNIM in Islamic banks</b>	<b>Determinants of NNIM in conventional banks</b>
<ul style="list-style-type: none"> <li>• Significant positive relationship with TL/TA (risk- organizational attributes).</li> <li>• Significant positive relationship with INFR (macroeconomic variables).</li> <li>• Significant positive relationship with SIZE (organizational attributes).</li> <li>• Significant negative relationship with NIEA/TA (fund uses management-business strategy).</li> </ul>	<ul style="list-style-type: none"> <li>• Significant positive relationship with EQ/TA (leverage-business strategy).</li> <li>• Significant positive relationship with CSTF/TA (fund sources management-business strategy).</li> <li>• Significant positive relationship with TLO/TA (leverage-business strategy).</li> <li>• Significant negative relationship with NIEA/TA (fund uses management-business strategy).</li> </ul>

## **6.5 Conclusion**

### ***6.5.1 Comparison of Profitability Measures between Islamic Banks and Conventional Banks***

Since the main goal of this research is to make a comparison between the performance of Islamic banks and the performance of conventional banks, along with defining the main determinants of performance in both types of banks, the researcher will start by making a comparison between the performances of both types of banks.

The paired sample t-test showed that the profitability measures which were found significant in the analysis were only two measures, the NIM and the NNIM and the results were in favor of conventional banks. Yet, a comparison among the other profitability measures revealed some interesting results.

The comparison will be made starting from 2004 and excluding 2002 and 2003 because in this year the economic reform started in Egypt. Egypt began introducing economic reforms intended to increase trade, facilitating business startups and promoting growth. All these changes are directly related to banks' performance. That's why the researcher is making the comparison between profitability measures starting from 2004.

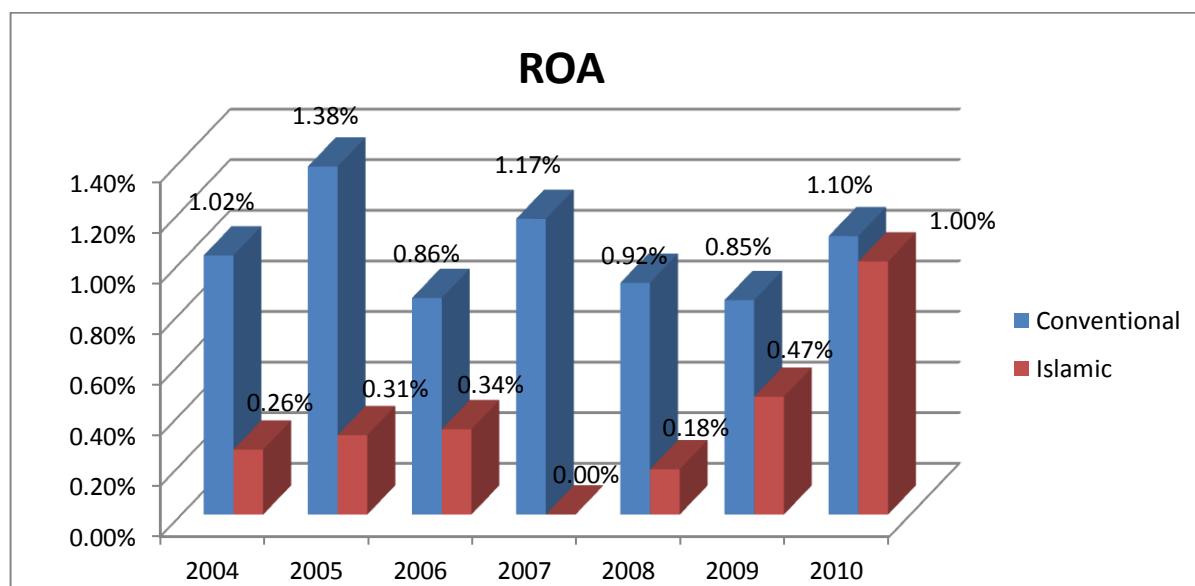
The first comparison between Islamic and conventional banks is concerned with the ROA ratios as shown in table (6.35) and graph (6.1).

**Table (6.35): Comparing the ROA of Islamic Banks and Conventional Banks**

ROA	2004	2005	2006	2007	2008	2009	2010
Conventional	1.02%	1.38%	0.86%	1.17%	0.92%	0.85%	1.10%
Islamic	0.26%	0.31%	0.34%	0.00%	0.18%	0.47%	1.00%

As it is clear from the above table that the ROA of conventional banks is higher than the ROA of Islamic banks all over the period from 2004-2010 and this is clearly shown in graph (6.1).

**Graph (6.1): Comparing the ROA of Islamic Banks and Conventional Banks**



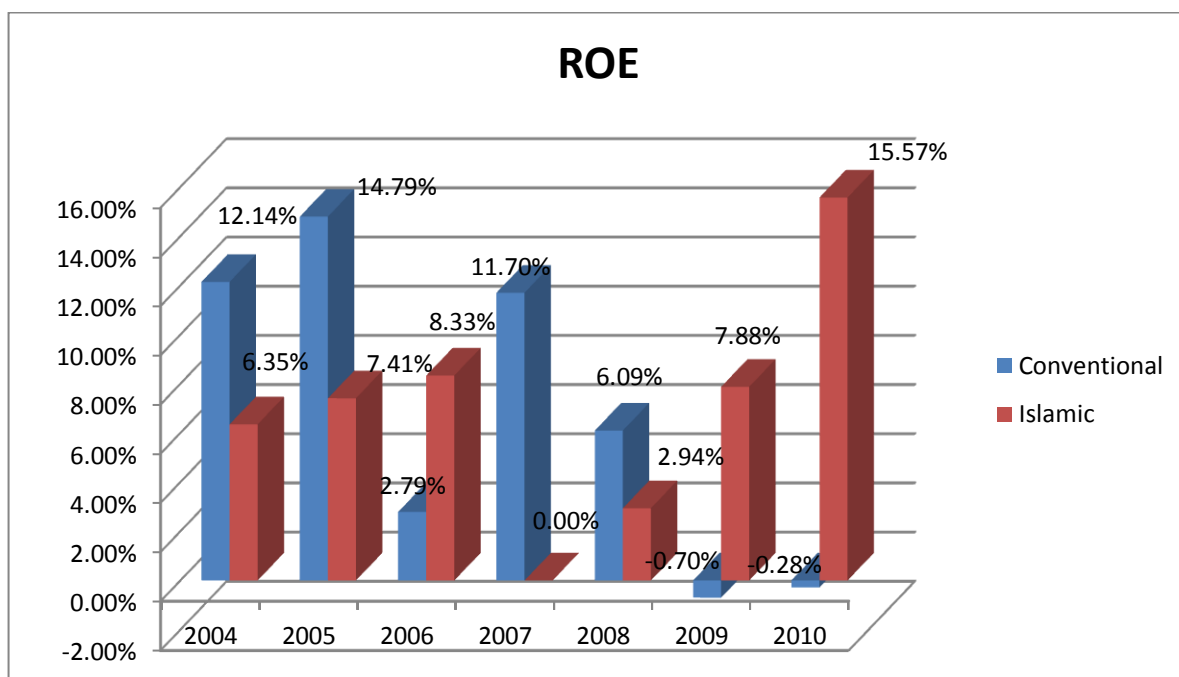
Concerning the ROE, the comparison is shown in the table (6.36) and graph (6.2).

**Table (6.36): Comparing the ROE of Islamic Banks and Conventional Banks**

ROE	2004	2005	2006	2007	2008	2009	2010
Conventional	12.14%	14.79%	2.79%	11.70%	6.09%	-0.70%	-0.28%
Islamic	6.35%	7.41%	8.33%	0.00%	2.94%	7.88%	15.57%

From the table and the graph, it can be inferred that there is a fluctuation in the ROE of Islamic and conventional banks. In some years, the ROE of conventional banks is higher (2004, 2005, 2007, and 2008), while in other years, the ROE of Islamic banks is higher (2006, 2009 and 2010). These fluctuations in this ratio could be due to many factors like changes in equity levels in both types of banks, loan loss provisions or changes in net income and any of its determinants.

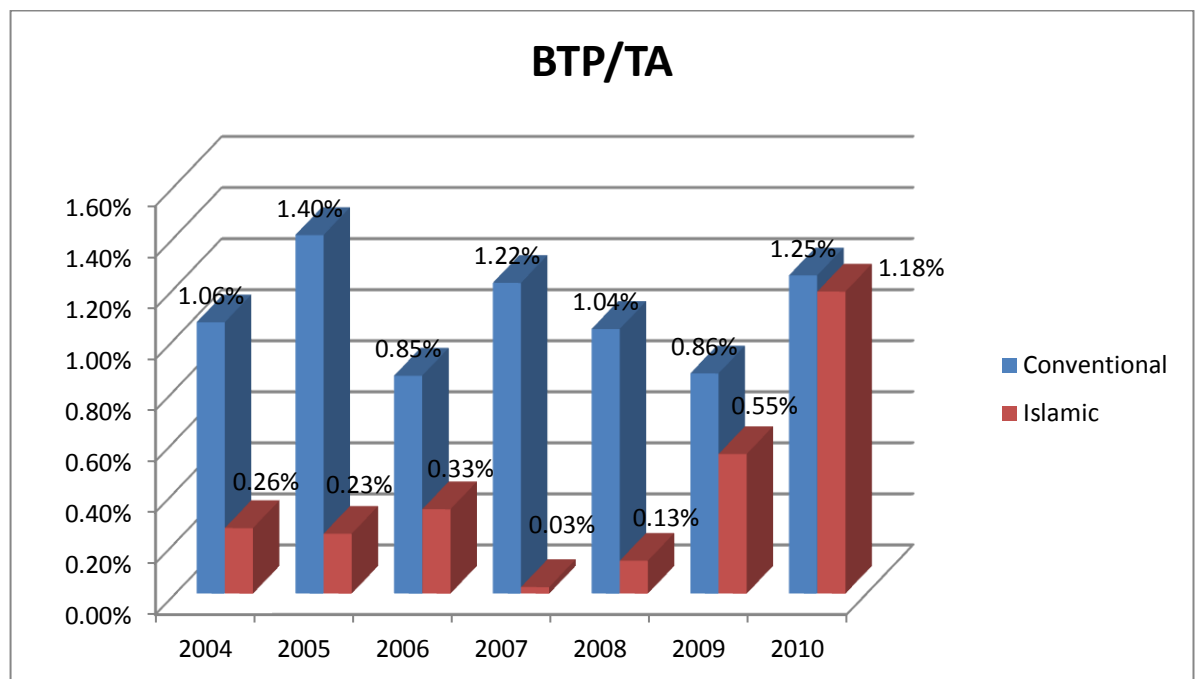
**Graph (6.2): Comparing the ROE of Islamic Banks and Conventional Banks**



**Table (6.37): Comparing the BTP/TA of Islamic Banks and Conventional Banks**

BTP/T. Assets	2004	2005	2006	2007	2008	2009	2010
Conventional	1.06%	1.40%	0.85%	1.22%	1.04%	0.86%	1.25%
Islamic	0.26%	0.23%	0.33%	0.03%	0.13%	0.55%	1.18%

**Graph (6.3): Comparing the BTP/TA of Islamic Banks and Conventional Banks**



Moving to the third profitability measure which is BTP/TA, it can be concluded that the comparison is in favor of conventional banks as it is higher over the period from 2004-2010. The results can be depicted from table (6.37) and graph (6.3). This result corresponds to the results from the ROA comparison as it shows the supremacy of conventional banks' performance over Islamic banks supporting the argument of the researcher that the performance of conventional banks in Egypt is better than that of Islamic banks.

When it comes to NIM and NNIM, those variables were proven to be significantly better in conventional banks than in Islamic banks through the T-Test.

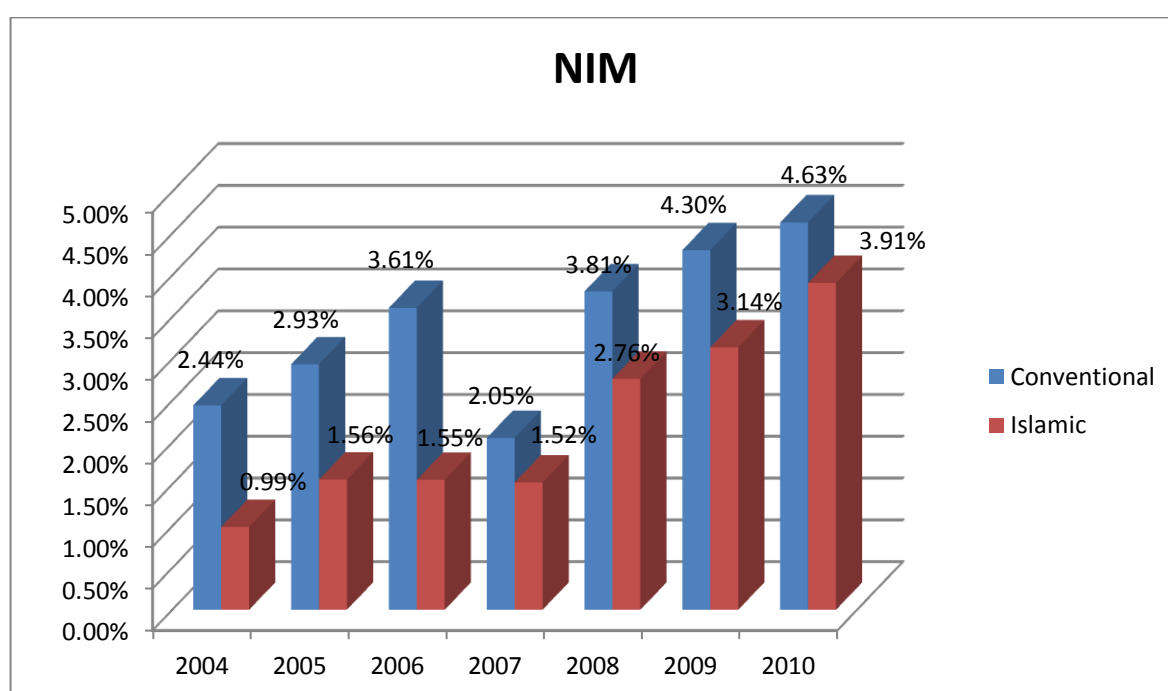
The following table (6.38) and graph (6.4) show the results of the NIM in both types of banks.



**Table (6.38): Comparing the NIM of Islamic Banks and Conventional Banks**

NIM	2004	2005	2006	2007	2008	2009	2010
Conventional	2.44%	2.93%	3.61%	2.05%	3.81%	4.30%	4.63%
Islamic	0.99%	1.56%	1.55%	1.52%	2.76%	3.14%	3.91%

**Graph (6.4): Comparing the NIM of Islamic Banks and Conventional Banks**



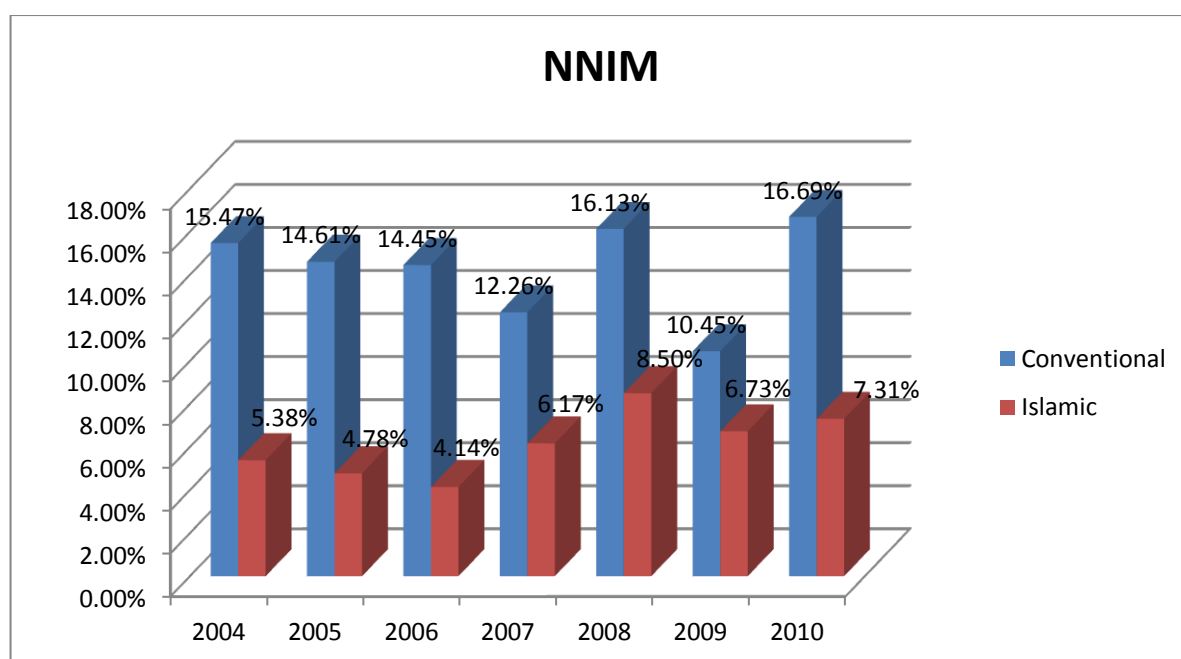
Once again, it is clear that the NIM of conventional banks is superior to the NIM of Islamic banks. This result is proved by the T-Test and it was proven to be significant.

Lastly, the NNIM comparison is shown in table (6.39) and graph (6.5).

**Table (6.39): Comparing the NNIM of Islamic Banks and Conventional Banks**

NNIM	2004	2005	2006	2007	2008	2009	2010
Conventional	15.47%	14.61%	14.45%	12.26%	16.13%	10.45%	16.69%
Islamic	5.38%	4.78%	4.14%	6.17%	8.50%	6.73%	7.31%

**Graph (6.5): Comparing the NNIM of Islamic Banks and Conventional Banks**



The above table and graph concerning the comparison of NNIM between conventional banks and Islamic banks, it can be concluded that conventional banks NNIM is higher than NNIM of Islamic banks all over the period from 2004-2010. This result is also proven from the T-Test and showed a significant lead of conventional banks.

### ***Researcher conclusion***

It can be concluded from the above analysis that conventional banks in Egypt are more profitable than Islamic banks except for the measure of ROE. Though the two types of banks operate under the same regulations and legislative rules that govern their functionality in the Egyptian market, yet the profitability of conventional banks is better. The gap that exists between the performance of Islamic banks and the performance of conventional banks can be attributed to a set of barriers and obstacles that Islamic banks face, namely:

1. Absence of accounting and auditing standards in Egypt tailored specifically for Islamic banks to function through.
2. Shortage of experts in Islamic banking and finance in Egypt since dealing within the Islamic banking framework requires specific qualifications and expertise.
3. Conflict between Islamic and conventional banks specially that the financial environment in Egypt is in favor of interest based system.
4. Possible conflict with the central bank since the rules and regulations set are in support of conventional banking system.
5. The Profit and loss sharing finance system is unpopular with Islamic banks customers.
6. More than 80% of financing in Islamic banks in Egypt is short-term while the profit and loss sharing system is best suited for long-term finance.
7. There aren't any kinds of Islamic financial products and markets to help Islamic banks manage their liquidity shortage or excess, moreover, the Islamic banks find themselves forced to deal with treasury bills with interest and loans from other banks in order to manage their liquidity issues.
8. Lack of knowledge of Islamic financial products available abroad since there are not enough experienced Islamic bankers.
9. Although the Islamic religion prohibits dealing with conventional banks due to the fact that they deal with interest in all kind of transactions, however, the Egyptian government showed a tendency towards limiting and suppressing the activities of Islamic banks in Egypt specially after the crisis that happened in Egypt during the eighties with Islamic money management companies that led to a severe control of

the central bank of Egypt over the practices of all banks and set heavy rules and regulations concerning the expansion of Islamic banks. In addition, Sheikh Tantawi's fatwa (advice) on interest, a top-government appointed Sunni religious authority, he said that bank customers could deposit funds for predetermined profits, in essence allowing interest and thus challenging the basis of Islamic finance.

For all the reasons mentioned above, it can be concluded why conventional banks' performance defeat the performance of Islamic banks in Egypt.

### ***6.5.2 Comparison of Determinants of Performance of Islamic Banks and Determinants of Performance of Conventional Banks***

It is clear from the analysis that there are some variables that were found to be significantly affecting the profitability of Islamic banks and conventional banks repeatedly all over the five regression models performed.

In case of the Islamic banks, it was found that there are three variables that are common determinants of profitability in most of the regression models which are SIZE, NIETA/TA and GDP. SIZE and NIEA/TA affect performance positively while GDP affects performance negatively. The first two variables affecting performance positively exhibit an expected relationship same as literature, however, the relationship between performance and GDP is ambiguous. Two other variables appeared only once in the analysis which are GDPPC and INFR. GDPPC has a positive relationship with NIM, whereas INFR shows a significant positive effect on NNIM. Both relationships are justified, expected and correspond to the literature.

Whilst in the case of conventional banks, four variables were found to be significant and repeating in most of the regression models which are CSTF/TA, EQ/TA, NIEA/TA and PLOL/TLO. CSTF/TA and EQ/TA have positive relationship on performance while NIEA/TA and PLOL/TLO show a negative effect on profitability. These relationships are expected and correspond to the literature. OH/TA showed three times in the models with an expected negative relationship with ROA, ROE and BTP/TA. TL/TA, GDPGR, TLO/TA and GDP appeared once in the analysis. The TL/TA, GDPGR and TLO/TA variables demonstrated a positive relationship with performance variables. TL/TA and

GDPGR affected NIM positively, whereas TLO/TA influenced NNIM positively. They all exhibit expected relationships that match the literature. The last variable which is the GDP, it has a negative effect over NIM. Again, this relationship is not expected and represents an ambiguous pattern of correlation between this macroeconomic variable and NIM as one of the profitability measures.

Regarding the negative impact found in the research of GDP over the profitability of Islamic and conventional banks, though the results are still ambiguous and unexplained, yet many justifications from the previous literature could be introduced.

Jaffar et al (2012) argued that during the expansionary stage of the economic cycle, the assets price increases, profit increases, aggregate demand increases. At the boom, risk exposure could be underestimated, credit standard are relaxed and consequently, loan loss provision is reduced. At the recessionary stage of the cycle, assets price fall, collateral value depresses, unemployment increases, lending reduces and banks need high capital. It was mentioned in their study that Cross (1982) argues that at the beginning of an expansionary phase, the profit of the bank increases, assets prices rise and customers' expectations are positive. At this phase, the increase in aggregate demand leads to increase in bank lending and economy's indebtedness. Moreover, during the boom, banks usually relax credit standards and consequently, banks start to underestimate their risk exposures. This leads to the deterioration in the quality of portfolio of banks and eventually leads to a decrease in the profitability of the bank.

Moreover, a study was made in Spain over the period of 1985-1997 by Salas and Saurina in 2002. They found that during economic boom, banks expand their lending activities and try to increase their market share. However, this action leads to accepting borrowers of lower credit quality generating an increase in bad loans and consequently, negatively affecting banks' profitability (Bikker and Hu, 2002; Fase, 2001; Van der Zwet and Swank, 2000).

Other researchers suggested that there are two types of causality for the relationship between banking performance and macroeconomics. They studied the influence of the performance and development of banking and financial system on economic growth,

and found a positive effect when focusing on the long term periods and negative effect when focusing on the short term (Arestis et al, 2001).

Hoggarth et al (1998) in their study of the determinants of performance of UK banks versus German banks argued that the behavior of real GDP cannot explain the greater variability of the profitability in the banking sector in the UK than in Germany. Yet, they didn't say that GDP didn't affect profits, only that they couldn't use it to explain different bank performance in UK and Germany.

This somehow resembles to the case in Egypt, except for the GDPGR and GDPPC, the GDP macroeconomic variable cannot be used to explain the relationship between banks' performance in Egypt and the GDP indicator as the relationship turned out to be negative and it is somehow an ambiguous result.

Staikouras and Wood (2011) argued that the use of GDP growth as a variable does not feature extensively in the literature. They stated that GDP could be viewed as measuring the size of the market in which banks operate. They argued that in case of upward economy case, there will be higher demand for bank loans than in downturns. If the number of banks operating in the market remains constant across the upturn cycle, under conditions of imperfect competition, it would be expected that bank profitability will be positively related to market size as measured by GDP. On the contrast, the relationship could be negative because countries with higher GDP are assumed to have a banking system that operates in a mature market resulting in more competitive interest and profit margins. Yet, still this case cannot be applied on Egypt as the market is not mature and the GDP of Egypt is not high.

Despite all the above debate about the effect of GDP on banks' profitability, the results of the study by Sufian and Parman (2008), yielded a negative relationship between banks' profitability and GDP, they argued that they don't have any expectation regarding the sign of the GDP variable and its effect on profitability. They also added that the GDP variable may have a positive or negative relationship with profitability levels depending on the country's economic condition. Favorable economic conditions are expected to result in higher demand and supply of banking services and would possibly improve banks' profitability. On the contrary, during bad economic conditions,

the banks' profitability levels could adversely be affected resulting in a negative relationship

The final argument by Sufian and Parman can be used to explain the weird and ambiguous relationship between Islamic and conventional banks' profitability and Egypt's GDP. Taking into consideration that Egypt is a developing country suffering from many economic, political and legislative turbulences and difficulties, it can be concluded that these unfavorable conditions eventually affected adversely the banks' performance and profitability.

Furthermore, it can be concluded from the analysis that the CSTF/TA repetitively shows a positive relationship with the profitability of conventional banks, while the NIEA/TA shows a positive relationship with the profitability of Islamic banks and negative relationship with the profitability of conventional banks. Since the CSTF/TA represents the liability side of the balance sheet and hence the fund sources management, thus it can be argued that the depository products for the conventional banks are crucial and essential for increasing their profitability. The NIEA/TA represents the usage side of the available funds, hence, it can be concluded that the Islamic banks are more concerned with their assets side of the balance sheet and the fund uses management strategy in order to increase it and consequently increase their profitability level. Unlike the conventional banks which focus more on controlling their NIEA/TA because they exhibit a negative effect on their profitability level.

This conclusion can be supported by a calculation of the ratio of total loans to total deposits for the two types of banks and the decomposition of this ratio into its components; loans and deposits.

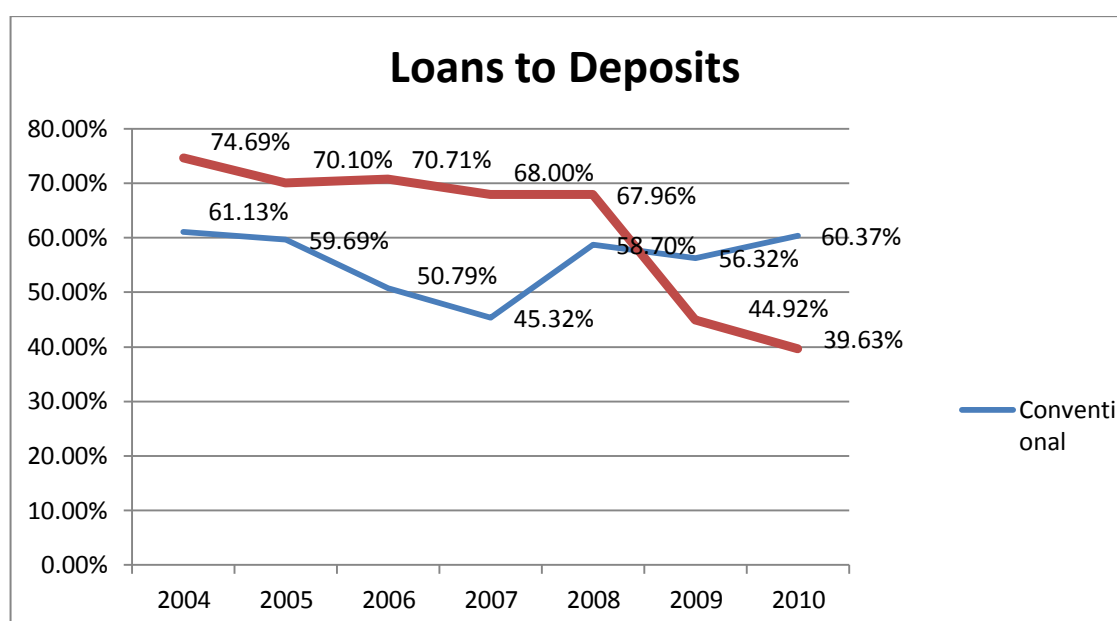
The calculation of this ratio is shown in table (6.40) and graph (6.6) and the decomposition of this ratio is shown in tables (6.41) and (6.42) for Islamic and conventional banks respectively along with the decomposition to its components.

**Table (6.40): Calculation of Total Loans to Deposits Ratio for Conventional and Islamic Banks**

Total loans/total deposits	2004	2005	2006	2007	2008	2009	2010
Conventional banks	61.13%	59.69%	50.79%	45.32%	58.70%	56.32%	60.37%
Islamic banks	74.69%	70.10%	70.71%	68.00%	67.96%	44.92%	39.63%

By examining the ratio of total loans to deposits for the two types of banks in table (6.40) and graph (6.6), it can be concluded that Islamic banks have higher loans to deposits ratio than conventional banks; meaning that Islamic banks are better able to use their funds by reinvesting them into Islamic uses. This conclusion supports the argument suggested before that Islamic banks' profitability is more dependent on the ability of the banks to efficiently use their funds and hence increase their profitability.

**Graph (6.6): Comparing Loans to Deposits Ratio of Islamic Banks and Conventional Banks**



Concerning the conventional banks, by analyzing the figures in the tables (6.41) and (6.42), it can be noticed that the amount of deposits percentage increase in conventional banks is higher than in Islamic banks. Even in the years which exhibit lower percentage



for conventional banks than Islamic banks, by checking the row of deposits increase, it shows a higher value in conventional banks than in Islamic banks. This fact supports the argument that conventional banks' profitability depends on the sources of funds i.e. the liability side of their balance sheet. Conventional banks always seek to attract new fresh deposits to increase their profitability because even if these deposits are not used to finance loans, they still can be invested in government treasury bills which generate interest revenues for the banks and hence increase their profitability.

**Table (6.41): Decomposition of the Ratio of Total Loans to Deposits for Islamic Banks**

Item	2005	2006	2007	2008	2009	2010
Total Loans	14,918,341,065	15,282,520,408	18,629,086,295	21,318,893,451	22,655,804,331	14,315,519,609
Total Deposits	18,211,915,883	19,899,725,822	23,996,061,384	28,395,593,077	31,255,812,933	35,486,581,400
Deposits increase	2,723,429,711	1,687,809,939	4,096,335,562	4,399,531,693	2,860,219,856	4,230,768,467
Loans increase %	6.77%	2.44%	21.90%	14.44%	6.27%	-36.81%
Deposits increase %	17.58%	9.27%	20.58%	18.33%	10.07%	13.54%
Loan increase	945,357,868	364,179,343	3,346,565,887	2,689,807,156	1,336,910,880	-8,340,284,722

**Table (6.42): Decomposition of the ratio of Total Loans to Deposits for Conventional banks**

Item	2005	2006	2007	2008	2009	2010
Total Loans	41,753,417,790	47,776,415,196	58,133,684,174	68,709,176,804	88,158,917,807	92,044,860,933
Total Deposits	66,344,488,019	80,835,341,931	111,704,013,603	138,053,715,941	145,258,831,057	162,049,296,869
Deposit increase	8,659,983,135	14,490,853,912	30,868,671,672	26,349,702,338	7,205,115,116	16,790,465,812
Loans increase %	7.95%	14.43%	21.68%	18.19%	28.31%	4.41%
Deposits increase %	15.01%	21.84%	38.19%	23.59%	5.22%	11.56%
Loan increase	3,076,167,190	6,022,997,406	10,357,268,978	10,575,492,630	19,449,741,003	3,885,943,126

### ***6.5.3 Contingency Approach Comparison with Previous Studies***

One major criticism of the contingency theory is that it is too hard for a single contingency study to consider a large number of contingency factors. Moreover, there tends to be a dependence placed on a relatively small number of variables. However, as Chapman (1997) argued that the implications of the range and depth of characterization of a particular study will be highly depending on the exact nature of the questions being asked and the methods being used to answer those questions.

The fundamental reason for using the contingency theory as the theoretical framework for this research is the ability to identify the internal and external forces determining the financial performance of Islamic and conventional banks in Egypt. This contingency research investigates how the determinants of financial performance in banks should be tailored in such a way to achieve a higher profitability level for the bank such as the business strategy, the organizational attributes and the environmental factors.

Still, it is worth noting that each study adopts a slightly different approach when applying the contingency theory. According to Fisher (1998), a contingent variable is relevant to the degree that businesses depend on that variable and how that variable exhibits major differences in how attributes and actions are associated with performance. He added that some contingency variables have priority or dominate other contingency variables because most contingency studies have included and selected their variables on an ad hoc basis and thus there might exist many potential variables inside and outside the organization.

The using of the contingency theory in this research to measure the determinants of profitability in Egyptian banks and to investigate whether the nature of the bank as being Islamic or conventional will affect those determinants is considered a new implementation

To the knowledge of the researcher, no previous studies applied the contingency theory in assessing the determinants of profitability in the banking sector while taking into consideration the nature of operations of the bank whether it is Islamic or conventional as a basis for comparison between the two types of banks.

The contingency theory is mostly used in the management accounting system design. Most studies focus on organizational strategy and aims, technology, organizational structure and management style as affecting the management accounting system development. However, the contemporary theory of management accounting has the limited aims of explaining how contingencies shape the form of management accounting systems (Woods, 2009; Cadez and Guilding, 2008; Chenhall, 2003; Gerhardy, 2002; Hartmann, 2000; Reid and Smith, 2000).

In 2013, a study was made by Elhamma to assess the impact of business strategy as one of the contingencies on budgetary evaluation in Moroccan firms. The research concluded that there is no significant relationship between business strategy and budgetary evaluation.

In 1999, Hatmann and Moers used the moderated regression analysis to test contingency hypotheses that predict interaction effects between budgetary and contextual variables.

Moore and Duncan (1989) performed a study in New Zealand that examined the relationship between the structural dimensions and the financial performance of public listed companies. They measured the effect of decentralization, market competition and size on the financial performance. The common factors between the study of Moore and Duncan and this study are in the employment of the size variable and using the financial performance as the dependent variable. Their study showed no effect of the size on the dependent variable and thus they didn't include it in their theoretical significant model.

Hongbo and Fangfang (2010) conducted an analysis of bank performance appraisal based on the contingency theory. They performed a theoretical and not an empirical analysis of how the contingency theory could be adopted to analyze the performance appraisal system and bank performance appraisal process based on environmental analysis.

Another banking-based research was performed by Alrawi and Thomas in 2007 to study the application of contingency theory on accounting information in the UAE banking sector. They investigated the requirements of accounting information in UAE banks and

how efficient is the accounting systems in those banks. They were seeking to determine the factors affecting the design of financial and managerial accounting systems in the UAE banks.

Taking into consideration the above presented arguments about the application of the contingency theory in management accounting, financial reporting and other banking studies, it can be concluded that this research attempted to test the effect of different contingent factors on the financial performance of banks in Egypt. The measurement of the determinants of profitability in the Egyptian banking economy is a new application of the contingency theory in financial accounting. The objective of the research is to determine the set of internal and external contingencies affecting the banks operating Egypt while taking into consideration the nature of the banks' operations whether being Islamic or conventional.

## Chapter Seven

### Conclusion

#### 7.1 Introduction

This chapter highlights the contribution of the present study to both literature and practice. It also provides different avenues for future research and presents the recommendations for future research as well as the limitations of this study and the final conclusion.

#### 7.2 Overview of the Research Study

The aim of the current research is to make an empirical and comprehensive comparison between the performance of Islamic banks and conventional banks in Egypt. The researcher is aiming at testing the following hypotheses:

- 1. The performance of conventional banks is better than the performance of Islamic banks.*
- 2. There is a relationship between the external and internal contingency variables and the performance of Islamic banks in Egypt.*
- 3. There is a difference between the contingent factors that affect the performance of Egyptian Islamic banks and those that affect the performance of Egyptian conventional banks.*

In order to test the first hypothesis, the researcher performed a paired sample t-test to compare the performance of the two Islamic and nine conventional banks under the CAMEL ratings which include capital adequacy, quality of assets, management performance, earnings and liquidity. The results in this part showed a superiority of conventional banks over Islamic banks in general; hence, the first hypothesis is accepted.

Concerning the second and third research hypotheses, an ordinary least square regression analysis has been employed to test for these hypotheses.

Concerning the second hypothesis, it has been found that the major determinants of ROA and BTP/TA in Islamic banks are size, NIEA/TA and GDP. ROA and BTP/TA are positively related with SIZE and NIEA/TA and negatively related with GDP. ROE was found to be positively affected by one variable which is NIEA/TA. GDPPC affected positively NIM while NNIM was found to be positively affected by TL/TA, INFR and SIZE and negatively affected by NIEA/TA. The two controversial results were in the negative effect of GDP over ROA and BTP/TA.

Concerning the third research hypothesis, it was concluded that there are differences between the determinants of profitability in Islamic banks and the determinants of profitability in conventional banks. In conventional bank, ROA and BTP/TA are affected positively by CSTF/TA and EQ/TA and negatively with OH/TA, NIEA/TA and PLOL/TLO. ROE are affected by the same variables except for NIEA/TA. While for the NIM, EQ/TA, TL/TA and GDPGR are positively related with this variable and negatively related with PLOL/TLO and GDP. Finally, the NNIM was found to be positively related to EQ/TA, CSTF/TA and TLO/TA and negatively related to NIEA/TA. Once again, the controversial and questionable negative effect of GDP appeared with conventional banks suggesting that an increase in the GDP level of the country is correlated with a decrease in the profitability of conventional banks as well as Islamic banks.

Moreover, the results showed that the fund uses management (NIEA/TA) affects positively the profitability of Islamic banks while the fund sources management (CSTF/TA) affects the profitability of conventional banks positively. These results suggest that the assets-liabilities management strategies differ within the two types of banks.

From the above results, it was concluded that the determinants of profitability in Islamic banks are different than those affecting conventional banks though both types of banks operated under the same taxation, laws and regulations.



### **7.3 Contribution to Literature**

The review of the literature showed that several studies were conducted in developed, Asian and gulf countries on Islamic banking in general and the determinants of profitability in Islamic banks in specific. However, virtually no pertinent research has been undertaken in Egypt to measure the determinative forces of profitability in Islamic banks performing in the market. Furthermore, the comparison with the determinants of performance of conventional banks in the same market has been lacking in Egypt. Consequently, the main motive for this research was the gap that existed in the literature in this particular point.

Moreover, the aim of this research is to make a contribution to the Islamic banking literature. Even though there is now a considerable literature on the effects of different internal and external variables on the profitability of Islamic banks, however, studies applied on Egypt are quite few. Although, Egypt is the first country to adopt the Islamic banking experience, yet no previous studies have offered a comprehensive assessment of all the circumstances and conditions surrounding the Islamic banking system in Egypt along with a determination of the factors affecting their performance in comparison to conventional banks working in the same market.

Though data on the two performing Islamic banks in Egypt were used before in many cross-country studies, yet no dedicated studies were undergone on Egypt alone by itself (Faizulayev, 2011; Karim et al, 2010; Hassan and Bashir, 2003 and Bashir, 2003). In effect, Egypt is considered the starting point of Islamic banking in its contemporary form through the establishment of the Mit Ghamr Bank founded by Dr. Al-Najjar in 1963 (Kazarian, 1993). All these reasons urged the need for such study.

This study has been an extension to the studies of Abduh and Idress (2013), Wahidudin et al (2012), Alkassim (2005) and Hassan and Bashir (2003) but in the context of a developing country in the Middle East, Egypt. The results of this research provided substantial empirical support to such studies.

There is a general awareness of the apparent gap between theory and practice in Islamic banking and finance. It has to be admitted that the number of studies focusing on the

comparison between the determinants of profitability of Islamic and conventional banks is limited in developing countries and doesn't exist in Egypt thus necessitating the initiation of such research in Egypt.

The theoretical framework employed in this research was distinctively different from traditional research studies conducted in the field of Islamic banking and finance. From a conceptual point of view, embracing the contingency theory to deduce the internal and external determinants of performance in Islamic banks in comparison to conventional banks is genuine. In this study, the internal and external contingencies that determined the profitability of Islamic and conventional banks in Egypt were uncovered and framed to add to the existing literature and empirical research in Islamic banking in general and in Egypt in specific.

Moreover, this research is an extension to the accounting studies which employed the contingency theory framework. Most of the studies in the literature used the contingency theory framework in the management accounting field. Application of the contingency theory in financial accounting is more recent than management accounting. Belkaoui (1983) is one of the early writers that adopted the contingency approach as the basis to study the influence of the environmental factors upon accounting while Thomas (1986) applied the contingency theory to corporate financial reporting. He indicated that the contingent factors fall into four possible classes which are societal, organizational, environmental and user characteristics variables. Another researcher that adopted the application of the contingency theory as a framework for international accounting studies is Schweikart (1985). Based upon comparative management research, he identified the likely environmental variables for a contingency framework as falling into one of the categories: educational, economic, political-legal and social. Yet, no one study, as far as the researcher knows, employed the contingency theory framework in the area of financial performance measurement. This study is considered as a step towards the embracement of the contingency theory in financial accounting and performance measurement.

Overall, this study provides theoretical validity by suggesting that the contingency theory may be appropriate in describing the practices and behavior of Islamic and conventional banking. In terms of discovering the profitability determinants of Islamic

and conventional banks in Egypt, the researcher believes that the contingency theory is the suitable theory to determine the profitability of banks working in Egypt taking into consideration the nature of their operations whether it is Islamic or conventional and how the nature of their operations affect those determinants and consequently their performance.

Eventually, this research planted a seed for further investigation on the comparison of the performance of conventional and Islamic banks in Egypt whilst determining the factors affecting their performance.

## **7.4 Contribution to Practice**

The aim of this research is to help researchers, policymakers, governments, and regulators to better comprehend the role of Islamic banking and finance and its actual conduct and behavior in Egypt in comparison to conventional banks.

To the best knowledge of the researcher, this study is the first detailed investigation of the determinants of profitability in Islamic banks in comparison to conventional banks in Egypt. It is also the first study to employ the contingency theory to determine the internal and external factors that affect the performance of banks taking into consideration the type and nature of the banks' operations whether being Islamic or conventional.

Given this context, the study also provides some suggestions for Egyptian banks on what are the factors that significantly influence their profitability levels. These suggestions can be used as a guide by Islamic and conventional banks in Egypt or any developing country with corresponding conditions.

Performance evaluation for Islamic and conventional banks is essential for managerial and regulatory purposes taking into account the rising competition and the continuous innovation in providing financial services. For managers, this study can help them in assessing the outcome of their previous managerial decisions. It could provide them with insight and understanding of the activities and required decisions that would enhance their financial performance. For Islamic banks' managers, they should focus more on the fund uses management side of their business strategy and how they can

create new financial products that would attract more customers and ultimately increase their profitability level. While for conventional banks, the results showed that their profitability significantly depends on the fund sources management. This conclusion should draw the attention of managers to the fact that they should emphasize on attracting more sources of funds which eventually would lead to an increase in profitability.

Also, the results of this study showed that the performance of conventional banks in general is better than that of Islamic banks. This result is considered as an alarm for Islamic banks' managers to improve their performance and search for new tools and ways to boost and ameliorate their performance in order to keep pace with conventional banks to attract a wider range of customers and consequently, increase their profitability levels.

Furthermore, bank regulators and policy makers can use this study to monitor the banks' performance to identify banks that are experiencing severe problems so as to ensure the safety and soundness of the banking system and maintaining the public confidence. Moreover, the results of this research suggest that policy makers in Egypt as an Islamic country should focus more on formulating sound and appropriate policies to enable the Islamic banks to differentiate their services from conventional banks' services and thus contribute more to economic growth.

In addition, there is a legal challenge in Egypt concerning the Islamic banking and finance. The legal aspects in Islamic finance represent an important bridge between the governing Shariah and the actual practice of Islamic finance. The legal system is supposed to regulate the Islamic banking business, besides imposing control and supervision on the affairs of the Islamic banks. This will eventually help in development and introduction of new financial products to cope with the rapid development of the Islamic banking and finance worldwide.

The Islamic banks' performance measurement is vital to key policy makers in the banking system to decide the set of regulations that best suit the Islamic financial system and to address issues regarding the viability of the Islamic banks and their ability to mobilize savings and facilitating transactions while pooling risks.

Moreover, the results of this research draw the attention to the need for an education of graduates and other personnel entering the Islamic financial market. This is necessary to keep pace with changes in financial innovation and technology in the Islamic banking field.

The characterization of the factors that determine the profitability of Islamic banks could be essential to depositors since they do not get fixed returns and their contract with the bank entitles them to varying returns based on the profitability of the bank's projects. In effect, a comprehensive understanding of the underlying factors that affect the banks' profitability is essential not only to managers, regulators or depositors. In fact, it is of crucial importance for many other stakeholders such as the central bank, the government and all other financial authorities in Egypt as an Islamic country.

The results of this research are also useful for exploring which contingencies are likely to affect the banking performance. In addition, the identification of such characteristics could help in improving and developing a framework of profitability determinants in Egypt that could be used as a framework and guidelines to maintain the actual strengths of banking system and controlling for the weaknesses that negatively affect their performance.

Despite the rapid pace of interest and growth in Islamic banking worldwide, this industry in Egypt is still governed by a regulatory and supervisory framework developed and designed specifically for conventional finance. The industry in Egypt is still operating in an environment where legal and tax rules, financial infrastructure, and access to financial resources and central bank liquidity do not appropriately take into account the very special nature of Islamic finance. Hence, this study would help in better understanding the urge to create a regulatory and supervisory framework that takes into consideration the unique nature of Islamic banking through the establishment of specialized Islamic standard-setting bodies.

The most important finding of this research is that Islamic banks' determinants of profitability differ from those of conventional banks. This signifies that many of the tools and techniques developed in conventional banking literature are not suitable for the Islamic banking system. Furthermore, future research is essential to discover

alternative methods that could be applied to Islamic banking in an attempt to enhance their performance and increase their likeliness from more customers in the Egyptian market that prefer more to deal with conventional banks.

Additionally, it is worth noting that the results of this study, though applied on an Islamic country, yet it can be used as a basis for comparison in non-Muslim countries. Although Egypt is classified as a Muslim country, however, there is no special regulative framework to govern and manage Islamic banks which is the case in many non-Muslim countries, thus making these results valid for comparison and generalization.

Finally, the results of this research reveal that determinants of profitability vary between different types of banks according to the nature of their operations whether Islamic or conventional. Moreover, the results exhibited differences in the determinants of profitability of banks in Egypt from other countries possibly as a result of different economic conditions, regulatory framework, and banking strategy. Hence, this study has contributed in paving the way for further empirical studies to investigate the effect of the nature of banks' operations whether being Islamic or conventional on determining the types of internal and external contingencies that influence the profitability of banks.

## **7.5 Limitations**

Any research study will encounter some limitations that may weaken the validity of the results, yet, as long as the researcher is able to identify these limitations, their adverse effect could be minimized.

As with most of the empirical studies, the present study has included many limitations that should be taken into consideration. These limitations represent constraints on the findings of this study and the generalization of its results.

Firstly, the sample size in this study may be judged to be small and this is due to the fact that this study is based on assessing the determinants of profitability of the two only Islamic banks that work in Egypt starting from 2002 till 2010. In addition, the conventional banks used in to compare their performance with Islamic banks are only nine banks and those are the banks listed in the Egyptian stock exchange. To this extent

the results from the study may suffer from small sample size. Future studies should use a larger sample by including larger number of years or trying to get access to the financial statements of Islamic windows in conventional banks which unfortunately were not accessible while the researcher was gathering the data.

Secondly, throughout the data collection, differences were found in figures related to financial statements in the first two years of the period of analysis, 2002 and 2003. The researcher did the best to find the most reliable data in order to be used in the analysis. Moreover, the study covers the period from 2002 to 2010 and this may lead to classifying its results as outdated. Yet, the period covered by the study led to results that are possible to be generalized over the current period starting from 2014. The skipped period (2011-2013) was a reflection of the abnormal political, economical and financial circumstances that characterized this period as a result of the political unrest and uprising which took place during the two consecutive revolutions. Thus using data for this period and including it into the analysis would distort the results and weaken the inferential power and generalization of this study.

Thirdly, the study used a number of ratios as proxy variables. However, each variable could be measured using more ratios to form a complete image of the behavior of this variable and its effect on performance. Equally, the dependent variables used in this study as a measure of profitability are limited to five measures. Yet, the performance of banks could be measured by many other ways.

Fourth, the study totally depended on the financial measures to evaluate the performance of Islamic and conventional banks. Many other measures could be used to assess the performance of banks other than the financial measures. Other non-financial measures could be used to perform a qualitative analysis which ultimately could yield more results that would help to infer a more comprehensive conclusion about the performance of banks.

Fifth, it is worth noting that a big and major impediment to this research is the factors related to the political and security turbulences and instabilities that happened in Egypt starting from the January 25<sup>th</sup> revolution in 2011. The conditions and circumstances that occurred in Egypt starting from this date negatively affected the continuation and the

on-time finishing of this research. This period was characterized by many sit-ins, upheavals and strikes that hindered the carrying on of the research.

Sixth, it should be mentioned that Egypt is a distinctive case compared with other Muslim countries when it comes to Islamic banking and finance. According to Warde (2000), Egypt is one of the few Muslim countries where the top religious establishment has approved and supported the interest-based banking system. The Egyptian government used its different institutions including Al-Azhar, Dar elIftaa' and the Central Bank to constrain the operations of Islamic banks. Such attitude of the Egyptian government towards any Islamic financial institution is the result of its suspicion that this Islamic financial institution is linked to Islamic groups especially after the crisis with the Islamic money management companies in the eighties.

Finally, the practices of Egyptian Islamic banks show a deviation from their Islamic and developmental principles. Such divergence could be justified by the restrictions imposed by the governmental policies and regulations which resulted in a degree of similarity between the operations of Islamic and conventional banks in order to maximize their profitability level.

## **7.6 Future Research**

Future research is necessary to remedy the shortcomings and build on the findings of the present research. It should be conducted to determine the generalization of the results of this study by investigating its consistency and reliability.

For future studies, it is recommended to have a wider scope for the study. As this research is confined only to the two purely Islamic banks working in Egypt since 2002, it might be more interesting to carry out the same research while trying to add to the existing sample the Islamic windows working in Egypt as branches of conventional banks and eventually increasing the sample size and thus adding to the inferring strength of the research.

Another possible extension to this study could include more variables on the side of dependent and independent variables. The dependent variables representing the performance measures could include more variables other than the ones used in this



study such as the economic measures of performance and the market-based performance measures. The economic measures of performance like the economic value added (EVA) and the risk adjusted return on capital (RAROC), while the market-based performance measures like the total share return (TSR) and the price-earnings ratio (P/E). Concerning the independent variables, more variables could be incorporated into the regression model like technology, organization structure and customer satisfaction. Moreover, qualitative analysis could be used to measure and compare the quality of services in the two types of banks, the variability and diversity of products introduced to customers and the level of customers' awareness of the Islamic financial products.

Another avenue for future research results from the globalization of the markets and the dynamic reformed financial environment, a study of the Islamic banks' efficiency system based on their stocks valuation and strategic positioning in the market is worthwhile conducting.

Furthermore, the results in this research showed that business strategy is one of the main determinants of profitability in Islamic and conventional banks alike. However, the research showed that in Islamic banks, the fund uses management strategies have a significant effect on profitability while in conventional banks; one of the significant determinants of their profitability was the fund sources management. Consequently, an interesting and potential area for research is to make a comparison of the asset-liability management strategies in Islamic and conventional banks. A thorough investigation in this research point could reveal much important information concerning the internal practices in these two types of banks.

The use of quantitative methods alone is valuable in establishing relationships between the internal and external contingencies and the profitability measures. Yet, it is considered weak when attempting to identify the reasons for those relationships. Therefore, using qualitative research along with quantitative methods in future studies may enable researchers to further explore the relationships among these variables.

Due to the domination of Islam in Egypt, religion is considered one of the main aspects that call for future research concerning its role in influencing the behavior of the Islamic

and conventional banks' customers which will ultimately affect those banks profitability at the end.

The present study revealed that, in general, the performance of conventional banks is significantly better than Islamic banks. Consequently, further research is needed to explore the reasons behind this widened gap in their performance. Such research will call for the inclusion of the effect of government and its intervention in directing the public preferences away from the Islamic banks and towards the conventional banks.

Any limitation of the current research may be considered as a call for future research. The political turbulences and its effect on the economic and financial conditions in Egypt could be investigated to analyze the response of the Islamic banks to these conditions and its effects on their performance in comparison to conventional banks especially after the revolution in 2011.

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